RESPONSE TO COMMENTS

ON THE

MUNICIPAL STORMWATER GENERAL PERMITS

National pollutant discharge elimination system (NPDES) and state waste discharge general permit for discharges from large and medium municipal separate stormwater sewers. (The Phase I Municipal Stormwater Permit)

NPDES and state waste discharge general permit for discharges from small municipal separate stormwater sewers in western Washington. (The Western Washington Phase II Municipal Stormwater Permit)

NPDES and state waste discharge general permit for discharges from small municipal separate stormwater sewers in eastern Washington. (The Eastern Washington Phase II Municipal Stormwater Permit)

January 17, 2007

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SUMMARY OF PERMIT DEVELOPMENT

The Phase I Municipal Stormwater Permit applies to Clark, King, Pierce, and Snohomish counties, as well as the cities of Seattle and Tacoma. These jurisdictions have been operating under a municipal stormwater permit since 1995.

Separate phase II municipal stormwater permits tailored for Eastern and Western Washington will regulate stormwater runoff from 102 cities and 13 counties across the state that have never before been subject to the regulations.

The Phase I, Phase II Western Washington, and Phase II Eastern Washington Municipal Stormwater Permits, have gone though the following development process:

May 16 to August 19, 2005 - The Western Washington Phase I and Phase II preliminary draft permits were made available for public review. Ecology scheduled four workshops during this period to explain the permits, explain the changes from the previous permit if there was one, and answer questions.

July to October 2005 - Phase II Eastern Washington Permit issued for public comment period for the preliminary draft.

February 15, 2006 to May 19, 2006 - Ecology issued final drafts of all three permits for a formal public comment period. Ecology scheduled four workshops during this period to explain the permits, explain the changes from the previous permit if there was one, and answer questions.

April –May, 2006 - A Public hearing for Eastern Washington phase II permit was held in Ellensburg on April 25th. Ecology also held a formal public hearing for the Phase I permit and the Western Washington phase II permit on May 2nd at the Pierce County Library Administrative Services Center in Tacoma. The purpose of the hearings was to provide an opportunity for people to give formal oral testimony and comments on the proposed permits. Testimony was provided on the Eastern Washington phase II permit at the Ellensburg public hearing.

January 17, 2007 – Ecology issued the Phase I, Phase II Western Washington and Phase II Eastern Washington Municipal stormwater permits.

February 16, 2007 - Effective date for the Phase I, Phase II Western Washington and Phase II Eastern Washington Municipal stormwater permits.

SUMMARY OF CHANGES

Ecology made numerous changes to improve clarity and readability of the permits. The following are some of the more significant changes made between the draft and final permits.

Phase I Municipal Stormwater Permit

- In the final permit, Ecology revised Special Condition S4 *Compliance with Standards* and added a procedure that permittees must follow if Ecology determines that the permittee is causing or contributing to a violation of state water quality standards.
- The final permit contains revised exceptions and variance criteria in Appendix 1. The permittees may use the criteria to determine exceptions and variances to the minimum requirements for new development and redevelopment.
- The deadline for adopting ordinances and implementing the new permit requirements to control stormwater runoff from new development, redevelopment, and construction sites was extended in the final permit from 12 months to 18 months from the effective date of the permit.
- Ecology simplified record keeping and cost accounting requirements in the final permit.

The Western Washington Phase II Municipal Stormwater Permit

- The final permit does not authorize the relaxation of thresholds that are less protective of the environment then those currently in effect by the permittee. Permittees may not repeal existing local requirements to control stormwater that go beyond the requirements of the final permit. Specifically, if a local government is currently regulating stormwater runoff at sites that are less than 1 acre they must continue to do so.
- In the final permit, Ecology revised Special Condition S4 *Compliance with Standards* and added a procedure that permittees must follow if Ecology determines that the permittee is causing or contributing to a violation of state water quality standards.
- The final permit contains revised exceptions and variance criteria in Appendix 1. The permittees may use the criteria to determine exceptions and variances to the minimum requirements for new development and redevelopment.
- The deadline for adopting ordinances and implementing programs to control stormwater runoff from new development, redevelopment, and construction sites was extended in the final permit from 24 months to 30 months from the effective date of the permit.
- Ecology simplified record keeping and cost accounting requirements in the final permit.

The Eastern Washington Phase II Municipal Stormwater Permit

- The final permit does not authorize the relaxation of thresholds that are less protective of the environment then those currently in effect by the permittee. Permittees may not repeal existing local requirements to control stormwater that go beyond the requirements of the final permit. Specifically, if a local government is currently regulating stormwater runoff at sites that are less than 1 acre they must continue to do so.
- In the final permit, Ecology revised Special Condition S4 *Compliance with Standards* and added a procedure that permittees must follow if Ecology determines that the permittee is causing or contributing to a violation of state water quality standards.
- The final permit contains revised exceptions and variance criteria in Appendix 1. The permittees may use the criteria to determine exceptions and variances to the core elements for new development and redevelopment.
- Ecology extended the deadline for adopting ordinances and implementing the new permit requirements to control stormwater runoff from new development, redevelopment, and

construction sites in the final permit from 12 months to 18 months from the effective date of the permit.
- Ecology simplified record keeping and cost accounting requirements in the final permit.

ORGANIZATION OF THE RESPONSE TO COMMENTS

Those who commented on the permits are assigned a letter-number code corresponding to the permit they commented on. If comments in a single comment letter applied to more than one permit the comment code for that letter starts with "C". The Building Industry Association of Washington (BIAW) for example, sent three separate letters, one for each of the permits, so they have been assigned three codes, E9, P17 and W4. The comment codes are:

C – Comment applies to all the permits
E – Comment applies to the eastern WA phase II permit
P – Comment applies to the phase I permit
W – Comment applies to the western WA phase II permit

The Response to Comments section is divided into four parts.

Part I – contains the response to general comments and policy issues related to two or more of the permits. This is the largest section, covering essentially everything except the stormwater management programs (Section S5) specific to each permit.

Part II – contains the response to comments related primarily to the Eastern Washington Phase II municipal Stormwater Permit.

Part III – contains the response to comments related primarly to the Phase I Municipal Stormwater Permit.

Part IV – contains the response to comments related primarily to the Western Washington Phase II municipal Stormwater Permit.

The responses have been numbered (by part and sequence) and indexed next to the code and name of the commenter to assist them in finding the response to their comment. A detailed list of the characterized comments is also provided at the front of the RTC section.

LIST OF COMMENTERS

Commenter Number	Name	Response to Comment Number
C1	King County	1.4, 1.10, 1.11, 1.13, 1.18, 1.20, 1.22, 1.25, 1.26, 1.27, 1.31, 1.40, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.9, 3.10, 3.11, 4.6, 4.7
C2	Muckleshoot Indian Tribe	3.3
C3	The Boeing Company	1.20, 1.22, 1.23, 1.25
C4	NOAA & USF&W	1.10, 1.11, 1.12, 1.13, 1.22, 1.25, 1.27, 1.28, 1.29, 1.30, 1.31, 2.36
C5	People for Puget Sound	1.10, 1.11, 1.12, 1.13, 1.22, 1.25, 1.28, 1.31, 2.36, 3.6, 3.7, 3.8, 3.10, 3.11, 4.6
C6	Public Employees for Enviro. Res. (Peer)	1.1, 1.7, 1.11, 1.12, 1.22, 1.25, 1.26, 1.27, 1.28, 1.31, 2.36, 3.3, 3.6, 3.7
C7	Mark Hoidal, General Car Wash	1.21, 1.22, 3.8
C8	Wilson Carwash Distributing	1.21
C9	Puyallup Tribe of Indians	1.8
C10	Carwash Enterprises	1.21
E1	Kittitas County Water Purveyors	1.3, 1.13, 1.15
E2	Roy Fanning	1.5, 1.13
E3	Center for Justice/Sierra Club	1.1, 1.2, 1.7, 1.8, 1.10, 1.11, 1.12, 1.13, 1.14, 1.22, 1.23, 1.24, 1.28, 1.40, 1.41, 1.46, 1.49, 1.53, 1.55, 1.56, 2.22, 2.23, 2.24, 2.28, 2.29, 2.30, 2.31, 2.36, 2.37, 2.65
E4	Central WA Homebuilders Assn.	1.0, 1.20, 1.21, 1.22, 1.40, 1.76, 1.77, 2.25, 2.27, 2.34, 2.36, 2.63, 2.68
E5	City of Kennewick	1.6, 1.20, 1.21, 1.22, 1.51, 2.23, 2.36
E6	Larry and Cheryl Morgan	1.5, 1.11, 1.13, 1.22, 1.28, 2.22, 2.64, 2.65, 2.66

E7	Otak, Inc.	1.13, 1.15, 1.17, 1.23, 2.23
E8	Spokane County	1.20, 2.26, 2.30
E9	Building Industry Association of WA	1.76, 1.77, 2.27, 2.29, 2.31, 2.34, 2.36, 2.62, 2.63, 2.66, 2.67
E10	City of Richland	1.0, 1.20, 1.21, 1.22, 1.23, 1.25, 1.26, 1.76, 2.23, 2.24, 2.25, 2.29, 2.30, 2.34, 2.36, 2.37, 2.68, 2.69
E11	Washington State University	1.4, 1.13, 1.16, 1.22, 1.30, 2.36
E12	City of Pullman	1.0, 1.4, 1.13, 1.17, 1.21, 1.22, 1.23, 1.28, 2.23, 2.24, 2.25, 2.30, 2.36, 2.37, 2.69
E13	City of Spokane Valley	1.6, 1.13, 1.15, 1.20, 1.21, 1.26, 1.28, 2.29, 2.30, 2.36
E14	City of Spokane	1.0, 1.2, 1.13, 1.19, 1.20, 1.21, 1.26, 1.29, 1.30, 2.24, 2.25, 2.30, 2.34, 2.36, 2.68, 2.69
E15	City of Walla Walla	1.13, 1.15, 1.17, 1.23, 2.23
E16	East Wenatchee, Wenatchee, Chelan and Douglas counties	1.20, 1.28, 1.51, 2.30, 2.34, 2.69
E17	Schwietzer Engineering Laboratories, Inc.	1.4, 1.13
E18	Sunnyside Valley Irrigation District	1.13, 1.15
E19	Assn. of Washington Cities	1.1, 1.6, 1.13, 1.28
E20	Eastmont Metropolitan Park District	1.9
E21	City of Moses Lake	1.6, 1.20, 1.22, 1.51, 2.23, 2.34, 2.36
P1	Snohomish County	1.0, 1.12, 1.18, 1.21, 1.22, 1.27, 1.30, 1.32, 1.33, 2.25, 2.36, 3.1, 3.4, 3.7, 3.8, 3.9, 3.10, 3.11, 4.6
P2	Snohomish County Prosecutor's Office	1.20, 1.22, 1.24, 1.27, 1.40, 1.41, 1.46, 1.48, 1.49, 1.51, 1.53, 1.54, 1.55, 1.57, 3.1, 3.2, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 4.6

P3	King County – Attachments	1.0, 1.4, 1.18, 1.20, 1.21, 1.22, 1.25, 1.26, 1.27, 1.30, 1.32, 1.33, 1.40, 1.47, 1.48, 1.50, 1.51, 1.53, 1.55, 1.57, 1.58, 1.61, 2.25, 3.1, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 4.6, 4.7
P4	Pierce County	1.4, 1.10, 1.11, 1.20, 1.21, 1.22, 1.25, 1.27, 1.28, 1.31, 1.32, 1.33, 1.40, 3.2, 3.4, 3.7, 3.8, 3.9, 3.10, 3.11, 4.6
P5	Clark County	1.2, 1.4, 1.12, 1.20, 1.21, 1.22, 1.25, 1.26, 1.27, 1.29, 1.30, 1.31, 1.32, 1.40, 1.51, 1.61, 2.36, 3.1, 3.3, 3.4, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 4.6
P6	City of Seattle	1.2, 1.18, 1.20, 1.21, 1.22, 1.24, 1.25, 1.26, 1.27, 1.29, 1.30, 1.32, 1.33, 1.40, 1.41, 1.46, 1.51, 1.52, 1.56, 1.58, 1.59, 1.70, 1.75, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 4.6
P7	City of Tacoma	1.2, 1.4, 1.10, 1.13, 1.18, 1.20, 1.21, 1.22, 1.25, 1.26, 1.27, 1.29, 1.30, 1.32, 1.33, 1.40, 1.51, 1.52, 1.55, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 4.6, 4.7
P8	Port of Seattle and Port of Tacoma	1.22
P9	Puget Sound Action Team (Ph I)	1.12, 1.22, 1.25, 1.27, 1.28, 1.31, 1.32, 1.40, 2.36, 3.4, 3.6, 3.7, 3.8, 3.10, 4.6
P10	Pacificorp	1.22, 3.1, 3.7
P11	Puget Sound Energy	1.2, 1.20, 1.22, 1.29, 3.1, 3.5, 3.7, 4.7
P12	Northfield Ventures LLC	1.21
P13	Puget Soundkeeper Alliance	1.1, 1.2, 1.11, 1.12, 1.21, 1.22, 1.25, 1.26, 1.27, 1.29, 1.30, 1.31, 1.32, 1.40, 1.47, 1.51, 1.55, 1.73, 1.74, 2.36, 3.1, 3.2, 3.3, 3.4, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 4.2, 4.6
P14	North Sound Baykeeper	1.1, 1.2, 1.11, 1.12, 1.21, 1.22, 1.25, 1.26, 1.27, 1.29, 1.30, 1.31, 1.32, 1.40, 1.47, 1.51, 1.55, 1.73, 1.74, 2.36, 3.1, 3.2, 3.3, 3.4, 3.6, 3.7, 3.8, 3.9, 3.10, 3.11, 4.2, 4.6

P15	Citizens for a Healthy Bay	1.12, 2.36
P16	Thom McConathy, CCWRC - Phase I	1.11, 1.12, 1.21, 1.25, 1.26, 1.27, 1.29, 1.30, 1.40, 2.36, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.9, 3.10, 4.7
P17	Building Industry Association of WA	1.12, 1.21, 1.64, 1.65, 1.66, 1.69, 1.73, 1.74, 1.76, 1.77, 2.34, 2.36, 3.5, 3.6, 4.7
W1	Association of Washington Cities	1.1, 1.4, 1.6, 1.13, 1.28, 1.31
W2	City of Auburn	1.6, 1.20, 1.22, 1.28, 1.31, 4.3, 4.4
W3	City of Bellevue	1.0, 1.2, 1.12, 1.20, 1.21, 1.22, 1.28, 1.31, 1.40, 1.61, 1.63, 1.65, 1.66, 1.77, 2.25, 2.36, 4.3, 4.4, 4.6, 4.8, 4.10, 4.13, 4.14, 4.20
W4	Building Industry Association of WA	1.2, 1.12, 1.21, 1.61, 1.64, 1.65, 1.66, 1.69, 1.73, 1.74, 1.76, 1.77, 2.34, 2.36, 4.7, 4.10, 4.13, 4.14, 4.15, 4.16, 4.17, 4.19
W5	City of Bothell	1.0, 1.2, 1.6, 1.22, 1.28, 1.30, 1.31, 1.40, 2.25
W6	City of Buckley	1.21, 1.22, 4.10
W7	City of Bremerton	1.0, 1.2, 1.4, 1.6, 1.8, 1.10, 1.20, 1.22, 1.28, 1.30, 1.31, 1.61, 1.62, 1.63, 1.64, 2.25, 4.1, 4.2, 4.5, 4.6, 4.9, 4.16
W8	City of Centralia	1.0, 1.15, 1.40, 2.25, 4.10, 4.16
W9	Thom McConathy, CCWRC - Phase II	1.10, 1.23, 1.28, 1.40, 4.2, 4.6, 4.8, 4.11, 4.12
W10	Jeff Coop, private citizen	1.10
W11	Dept. of Com. Trade & Economic Dev.	1.15
W12	City of Edmonds	1.6, 1.20, 1.28, 1.31, 4.6
W13	City of Everett	1.0, 1.6, 1.12, 1.13, 1.16, 1.20, 1.22, 1.23, 1.28, 1.29, 1.30, 1.47, 1.48, 1.51, 1.55, 2.25, 2.34, 2.36, 4.3, 4.4, 4.6, 4.7, 4.8, 4.9, 4.10, 4.11, 4.13, 4.14, 4.15, 4.16, 4.20

W14	City of Federal Way	1.0, 1.3, 1.4, 1.6, 1.12, 1.20, 1.22, 1.28, 1.30, 1.31, 1.40, 1.47, 1.51, 1.61, 1.71, 1.72, 2.25, 2.36, 4.3, 4.4, 4.6, 4.7, 4.11, 4.12, 4.14, 4.16, 4.18, 4.20
W15	Alan Gervais, private citizen	1.13
W16	City of Gig Harbor	1.6, 1.8, 1.13, 1.17, 4.9, 4.13
W17	Regional Road Maintenance ESA Forum	1.0, 1.6, 1.13, 1.16, 1.20, 1.22, 1.23, 1.28, 1.30, 1.40, 1.47, 1.48, 1.49, 1.51, 1.53, 1.55, 2.25, 4.6, 4.8, 4.9, 4.10, 4.11, 4.13, 4.20
W18	City of Issaquah	1.0, 1.2, 1.4, 1.20, 1.22, 1.28, 1.30, 1.31, 2.25, 4.3, 4.4, 4.6, 4.8, 4.11
W19	City of Kent	1.0, 1.3, 1.4, 1.6, 1.21, 1.28, 1.30, 1.31, 2.25, 4.6, 4.8, 4.10, 4.11, 4.20
W20	Jim Loring, private citizen	1.28, 1.30
W22	City of Kirkland	1.21, 1.22, 1.28, 1.31, 4.3, 4.4, 4.6, 4.7, 4.10, 4.11, 4.13, 4.18
W23	Kitsap County Public Works Dept.	1.0, 1.3, 1.4, 1.22, 1.23, 1.28, 1.30, 1.31, 1.32, 1.61, 1.62, 1.63, 1.67, 1.68, 2.25, 4.3, 4.4, 4.9, 4.13, 4.16, 4.18, 4.20
W24	City of Longview	1.0, 1.2, 1.6, 1.12, 1.20, 1.22, 1.28, 1.30, 1.31, 1.40, 1.61, 1.62, 1.64, 1.65, 1.66, 1.76, 2.25, 2.34, 2.36, 4.6, 4.8, 4.11, 4.12, 4.13, 4.14, 4.15, 4.16, 4.18, 4.19, 4.20
W26	Lummi Natural Resources Dept.	1.24
W27	City of Mill Creek	1.0, 1.2, 1.3, 2.25, 4.7
W28	City of Milton	1.0, 1.4, 1.6, 1.20, 1.22, 1.28, 1.31, 2.25, 4.3, 4.4, 4.11
W30	North Sound Baykeeper	1.1, 1.2, 1.6, 1.7, 1.10, 1.11, 1.12, 1.13, 1.14, 1.21, 1.22, 1.23, 1.28, 1.30, 1.31, 1.47, 1.53, 1.55, 2.36, 4.2, 4.3, 4.4, 4.5, 4.6, 4.10, 4.14, 4.15, 4.16, 4.20

W31	City of Olympia	1.0, 1.12, 2.25, 2.36, 4.14
W33	City of Port Angeles	1.4, 1.13, 1.19, 4.1
W34	Port of Bellingham	1.2, 1.13, 1.15
W35	Port of Edmonds	1.15
W36	Port of Seattle (Aviation Enviro. Group)	1.8, 1.13, 1.17, 4.1
W37	Port of Skagit County	1.13, 1.17, 4.1
W38	Lynn Cornelius, private citizen	1.6, 1.13
W39	Puget Sound Action Team	1.6, 1.7, 1.10, 1.12, 1.13, 1.22, 1.28, 1.30, 1.31, 2.36, 4.2, 4.6, 4.7, 4.13, 4.16, 4.20
W40	Puget Soundkeeper Alliance	1.1, 1.2, 1.6, 1.7, 1.10, 1.11, 1.12, 1.13, 1.14, 1.21, 1.22, 1.23, 1.28, 1.30, 1.31, 1.47, 1.53, 1.55, 2.36, 4.2, 4.3, 4.4, 4.5, 4.6, 4.10, 4.14, 4.15, 4.16, 4.20
W41	City of Redmond	1.28
W42	City of Renton	1.0, 1.2, 1.3, 1.4, 1.6, 1.12, 1.15, 1.20, 1.22, 1.24, 1.28, 1.30, 1.31, 1.40, 1.48, 1.51, 1.53, 1.55, 1.76, 2.25, 2.34, 2.36, 4.2, 4.6, 4.8, 4.10, 4.11, 4.12, 4.13, 4.14, 4.15, 4.16, 4.18, 4.20
W44	Rosemere Neighborhood Association	1.10, 1.26, 1.27, 1.28, 4.6, 4.7, 4.9
W45	City of Seatac	1.8, 1.13, 1.22, 1.61
W46	City of Seattle	1.61, 1.70, 1.75
W47	Skagit County	1.12, 1.15, 1.22, 1.28, 2.36, 4.2, 4.8, 4.11, 4.13, 4.14, 4.20
W49	The Suquamish Tribe	1.5, 1.8, 1.13, 4.13
W50	Thurston County W&WM	1.2, 1.11, 1.12, 1.20, 1.22, 1.28, 1.30, 1.31, 1.40, 1.61, 1.62, 2.36, 4.11, 4.14
W51	City of Vancouver	1.0, 1.20, 1.21, 1.22, 2.25, 4.10, 4.11

W52	Internal	1.24
W53	Whatcom County	1.0, 1.8, 1.13, 1.25, 1.27, 1.28, 2.25

The original public comment letters and emails can be viewed at Ecology's website:
http://www.ecy.wa.gov/programs/wq/stormwater/municipal/index.html

LIST OF RESPONSES TO COMMENTS (RTCs)

PART I: RESPONSES TO COMMENTS ON COMMON AREAS OF PERMITS

PART II: RESPONSES TO COMMENTS ON EASTERN WA DRAFT PERMIT

PART III: RESPONSES TO COMMENTS ON PHASE I DRAFT PERMT

PART IV: RESPONSES TO COMMENTS ON PHASE II WESTERN WA

PART I: RESPONSES TO COMMENTS ON COMMON AREAS OF PERMITS

GENERAL COMMENTS

RTC # 1.0 S5.A.4 Cost Tracking and Reporting

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permit.

Commenter(s): E4, E10, E12, E14, P1, P3, W3, W5, W7, W8, W13, W14, W17, W18, W19, W23, W24, W27, W28, W31, W42, W51, W53

Range of Comments:

- Suggested language for this section: *Each permittee shall track the estimated cost of development and implementation of the SWMP required by this section and report this information in the annual report. Cost estimates may be based on actual expenditure data, or on surrogate parameters such as engineer's cost estimates for permit-related elements of construction projects, or similar estimates based on variable information and commonly-accepted professional practices. In the event that estimates of expenditures are used, the permittee shall describe the estimation method and the documentation used as a basis.*
- The cost reporting instructions of Appendix 3 (Phase II W WA permit) are far too complicated and will not lead to useful cost comparisons. The methods must be robust, simple, and lead to documentable estimates.
- Eastern Washington Phase II Permit Fact Sheet S5.A.4.a.ii, page 28. This page requires the tracking of costs for specified activities in order that Ecology may obtain data to evaluate the MEP standard for future permits. Since the cost of implementation is not the basis for determining MEP, and since the permit complies with the Clean Water Act, Ecology should remove the financial reporting requirement. This approach directly contradicts the local jurisdiction's authority and flexibility as allowed in the Clean Water Act. Ecology should indicate by what statutory authority it can require this information and to what program objective it applies. A requirement by Ecology to require local jurisdictions to track these costs for stormwater MEP evaluation purposes imposes another burden on local jurisdictions. It is not apparent what will be gained by tracking these costs to evaluate an MEP standard for future permits.
- Tracking costs goes beyond the federal requirements, will not result in meaningful or comparable information (such as meeting MEP) and should not be required. Ecology should survey permittees instead.
- The expectation that spending on programs cannot be reduced from year to year is untenable.
- We can provide costs in accordance with State Auditor's requirements but are concerned with the level of detail required.
- Cost tracking should not begin until the date of permit issuance.

Response to Comments:

- Federal regulations require cost accounting for Phase I permittees.

- Ecology agrees to simplify this requirement. Our intent is to collect only verifiable information and we may consider gathering cost data through surveys and in accordance the State Auditor's requirements.
- The CWA and federal stormwater regulations require MS4s subject to NPDES permits to reduce the pollutants in stormwater discharges to the maximum extent practicable (MEP). The regulations require the implementation of best management practices (BMPs) to meet the MEP standard. BMPs include both source control and treatment measures. Documenting program costs is necessary to evaluate practicability and demonstrate meaningful progress toward MEP compliance. It also helps Ecology estimate the cost of permit compliance statewide.
- Ecology agrees that reporting gross, aggregate estimations of overall program costs and full time employee (FTE) numbers may be all that is needed to assess progress toward MEP compliance. Cost estimates may be based on actual expenditure data, or on surrogate parameters such as engineer's cost estimates for permit-related elements of construction projects, or similar estimates based on variable information and commonly-accepted professional practices. In the event that estimates of expenditures are used, the permittee should describe the estimation method and the documentation used as a basis.
- All the permits will only require cost reporting only upon request by Ecology.
- Audits of permittee financial statements on stormwater program activities and expenses are planned periodically. No surveys are planned at this time. Ecology expects that local governments will complete financial reports in accordance with generally accepted accounting principles.

RTC # 1.1 Permit Re-openers

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits.

Commenter(s): C6, E3, E19, P13, P14, W1, W30, W40

Range of comments:

- If Ecology chooses to include additional measures and requirements beyond the EPA federal minimum requirements, the Legislature should review and consider what they are, how much they will cost and what they will achieve. No such review has been conducted, nor has there been an opportunity to at least brief the relevant Legislative Committees on the details and issues surrounding these permits. W1, E19
- In light of the claims challenging the Environmental Protection Agency's failure to consult with federal wildlife agencies, and the probability that EPA will do these consultations, we suggest this, and other NPDES permits issued before consultation is completed, contain an explicit "re-opener clause" requiring Ecology to make any changes to the permit at EPA's request through permit modification. W30, W40, P13, P14

Response to comments:

- Ecology disagrees that there has not been an opportunity to brief the relevant Legislative Committees on the details and issues surrounding these permits. These permits have been under development for more than three years and

through out that time Ecology has been transparent and public regarding both the content and process for developing both the phase I and the two phase II municipal stormwater permits. Given that the phase I permit expired in July of 2000, and under the federal phase II regulations the phase II permits were to have been issued in December 2002, Ecology does not believe additional delays in issuing these permits are appropriate. Ecology agrees with the commenters that the Legislature should have the ability to review, and if necessary provide Ecology with Legislative direction regarding these permits. To accomplish this Ecology is including a permit condition in all three permits which would allow Ecology to re-open the permits if the Legislature acts on these permits.

- There has been a notice filed against the EPA claiming that the EPA is in violation of the federal Endangered Species Act for EPA's alleged failure to consult with NOAA and USFWS (the Services) over the EPA's oversight of Ecology's NPDES permit program. A formal complaint (lawsuit) has not been filed against the EPA or Ecology/Washington State. The EPA has not requested that Ecology include a "re-opener clause" requiring Ecology to make any changes to the permit at EPA's request through permit modification, and Ecology does not feel such a re-opener is necessary. Ecology does include provisions in all permits allowing the permits to be re-opened based on new information which indicates the cumulative effects on the environment from discharges covered under the permit are unacceptable.

RTC # 1.2 Prescriptive Permit/Review and Approve SWMPs

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits.

Note: see also RTC #11 Stormwater Basin Planning

Commenter(s): E3, E14, P5, P6, P7, P11, P13, P14, W3, W4, W5, W7, W18, W24, W27, W30, W34, W40, W42, W50

Range of comments on the issue:

- The draft permit's use of prescribed performance measures for compliance places a burden on the permittee's review to discern unintended consequences of permit language that could make compliance difficult or impossible.
- Concern about the possibility that permittees will be out of compliance if a performance measure is missed. Please structure the permit to acknowledge that implementing the SWMP is the permit compliance measure and that to the extent possible, individual performance measures provide a measure of the success of implementing the program. It can't be a SWMP pass/fail based on each individual performance measure.
- Concern about situations where existing program is very close to the permit requirement, but not exactly the same. It will take a disproportionate effort to make a small change and for very little measurable benefit. It should not be an immediate priority to make these small changes, permittees should be allowed flexibility to prioritize implementation deadlines.
- Hope permit will allow us to continue efforts to develop and implement the best program to address urban challenges. Need a permit that: 1) is clear about our joint desire to have Water Quality Standards in the receiving water as the long-

term goal, 2) allows permittees to direct resources toward efforts that provide greatest value to the environment for level of investment, and 3) has a mechanism by which we can adjust our program as new data and information become available.

- Add to (*Phase I*) S5.B: "*During the coverage period of the permit, if the Permittee can demonstrate an equivalent or improved approach to any of the components listed within the SWMP, Ecology can modify the permit components, including minimum performance measures, upon approval of a request be the permittee. Permittee shall be responsible for providing funding to cover the costs associated with review and approval by Ecology unless Ecology agrees otherwise. Permittee shall update its SWMP as necessary to include any changes caused by modifications made under this permit.*"
- Seattle prefers the approach in the 1995 permit – permittee drafts a tailored SWMP and Ecology evaluates and approves each SWMP – but recognizes Ecology does not want to review and approve each SWMP.
- The deadlines and language for 100% compliance creates a risk for the permittee by missing one element and therefore leaving an opportunity for third party lawsuits. This permit is too prescriptive and does not allow for new management approaches that might provide a better return on the public investment.
- Support Ecology's option prescribing one set of requirements for Phase II Western Washington permittees. Within this option permittees must have the flexibility to develop an individualized stormwater program – suggestions are included on specific permit conditions.
- Permit far exceeds the EPA requirements. Rather than flexible, locally-tailored program the permit contains prescriptive program. Potential to implement innovative, cost-effective compliance solutions has been removed. In some cases, existing programs that meet the intent of the federal regulations will need to be completely modified.
- Many requirements cannot be justified when compared to EPA's intent for Phase II, or when tested against their effectiveness towards improving water quality.
- The proposed permit for Western Washington exceeds the proposed requirements for Eastern Washington, creating inequities that cannot be justified by climatic differences.
- Since one-size fits all approach provides less flexibility to tailor local stormwater programs suggest requiring both Phase I and II permittees sharing a basin to cooperatively develop SWMPs tailored to local conditions and priorities.
- Questions on Ecology review and approval of SWMPs and annual reports. Does failure to achieve a minimum measure constitute a violation?
- Under all permits permittees must regularly update their SWMP. Phase I permittees do not have to submit updates to the SWMP, Western Washington Phase II permittees have to submit new copies of the SWMP each year.

Response to the range of comments:

Note, see also RTC #11 Stormwater Basin Planning/Watershed-based SWMPs and RTC #39 TMDL Requirements

- Ecology appreciates the burden for review of these draft permits, and appreciates the effort made to identify unintended consequences of the permit language.

- Prescriptive performance measures make it possible for permittees, Ecology and the public to determine whether a permittee is in compliance with the permit. While this may heighten concerns about liability for the permittee, it also provides the permittee with a clear pathway to compliance with the permit.
- Changing the permit to base compliance on overall SWMP implementation with the detailed performance measures serving as "measures of success" creates uncertainty about the standard for compliance with the permit. The result is either an unenforceable permit, or a situation where compliance is determined through lawsuits and administrative appeals. While strict compliance cannot be based on overall SWMP implementation, Ecology's anticipated implementation strategy for these permits is to emphasize technical assistance and working with permittees to successfully manage stormwater. Ecology has the authority to exercise discretion when enforcing these permits and take into account overall program compliance.
- Where a stormwater program component is already close to the compliance standard it should not require that much effort to make the incremental change.
- When drafting these permits Ecology requested input on innovative, cost-effective solutions for including in the permit as alternative performance measures. Any suggestions received were included in the permit to allow use of these measures by all permittees. Ecology also drew on permits issued in other states, the experience of Phase I permittees in this state, the Eastern Washington model stormwater program and EPA guidance materials to develop the performance measures in these permits. The permit does not explicitly prohibit the use of other solutions not required under the permit. If major advances in stormwater management occur during the permit term that make permit requirements obsolete, it is possible to modify the permit. Otherwise, future permits can incorporate innovative solutions not available now.
- In response to the request to add language to condition S5 allowing Ecology approval of modifications to permit components, including Minimum Performance Measures, it is not possible for Ecology to modify permit conditions without following the permit modification requirements of Chapter 173-226 WAC and Title 40 CFR Part 124. Only minor modifications such as correcting typographical errors can be made without following the formal permit modification procedures. Condition G14, General Permit Modification and Revocation, already addresses permit modifications and no change in condition S5 is needed.
- EPA regulations for the both the Phase I and Phase II municipal stormwater permits envisioned tailored, locally-developed SWMPs. To meet the required federal standard to reduce the discharge of pollutants to the maximum extent practicable, each locally-developed SWMP must be reviewed and approved by Ecology, and there must be an opportunity for public review and comment on Ecology's decision (9th Circuit Court of Appeals, Environmental Defense Center, et. al. v. EPA, September 15, 2003). Individual review of each program would require substantial state resources and would significantly delay permit issuance for many jurisdictions. As explained in the fact sheet Ecology has instead decided to establish explicit requirements for SWMPs that, when implemented, represent

the reduction of pollutants to the MEP. The requirements established for the SWMPs in the permits fall within the EPA regulations for Phase I and Phase II municipal stormwater NPDES permits.

- The determination of what constitutes the reduction of pollutants to the Maximum Extent Practicable (MEP) for the Phase II permits for Western and Eastern Washington goes beyond consideration of climatic differences. The MEP determination takes into consideration the status of local stormwater management programs, the magnitude of the stormwater discharge problem, and the presence of other programs directing stormwater controls, such as the *Puget Sound Water Quality Management Plan*. The differences between the Western and Eastern Washington Phase II permits reflect that determination.
- Ecology has not included approval of all SWMPs or annual reports as part of the administration of these permits. To do so would require significantly increased staff resources. Instead, minimum measures have been established to simplify self- assessment of compliance. The public posting of the SWMPs and annual reports provides the public with the ability to assess the ability of municipalities to achieve compliance. Ecology anticipates evaluating individual permittees' programs based on an audit process.
- Condition S9 is modified in Phase I to include submission of updates to SWMPs. There are no changes to Phase II permits however. Because of the implementation schedule for building a SWMP, it is anticipated that each year there will be major changes in Phase II SWMPs and so a new submission is in order.

RTC # 1.3 Permit Fees

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E1, W14, W19, W23, W27, W42

Comments:

- The proposed fee of $1500/year for secondary permittees is cost-prohibitive for most/all E WA irrigation entities.
- We are concerned that Phase II jurisdictions will be paying new permit fees, yet Ecology will not have sufficient staff to support the program. W14, W19, W23, W27, W42

Response to Comments:

- These comments are addressed with the other public comments received on the proposed permit fee rule revision. Ecology established a new scale of fees for secondary permittees. For more information please see Ecology WebPages at: http://www.ecy.wa.gov/programs/wq/permits/permit_fees/index.htm.

RTC # 1.4 Cost of Permit Compliance

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits.

Commenter(s): C1, E11, E12, E17, P3, P4, P5, P7, W1, W7, W14, W18, W19, W23, W28, W33, W42

Range of comments:

Permit implementation will be costly

- Compliance with both the Phase I and Phase II permits will require significant new expenditures for local governments. Costs could require a five to ten percent increase in current spending. Other programs may be cut to fund stormwater. We urge Ecology to advocate for increased state funding for the permits. C1, P3, P4, P5, W7, W18, W28, W33
- Secondary permittees do not have the option of imposing a tax to cover the costs of these permits. E11

Costs outweigh benefits of the permits

- It is not clear how the increased spending for monitoring will reduce pollution and increase water quality. P5, P7
- Projected costs of implementing these permits far exceed any possible benefit to the environment. E11, E12, E17, W14

We may be liable for "takings"

- The permits are expensive; do not go beyond federal requirements. We may be liable for "takings" due to increased stormwater requirements. W1, W18, W19, W23, W42
- Implementing to a "pre-developed condition" is excessively costly. W7, W14

Response to comments:

- Ecology realizes the permits will be costly to implement. We are working in many venues to provide technical assistance and funding opportunities for permittees. The Governor's proposed budget provides more than $26 million dollars for stormwater, of which $9 million is specifically allocated to assist local governments with meeting the phase II permit requirements.
- Monitoring will be used as one type of measure of permit effectiveness.
- *See RTC #61 on Manual as a Rule*

RTC # 1.5 No permit provisions to prevent downstream flooding/impacts

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E2, E6, W49

Comments:

- Permit falls short in protecting downstream landowners from increased stormwater flows.
- Stream habitat, shellfish and personal property are damaged as a result of increased stormwater flows. The permit does not protect private property rights.
- Streams are inappropriately used as part of the MS4.

Response to Comments:

- This permit has limited scope. It requires cities and counties covered under the permit to adopt and implement regulations to address new stormwater flows into their MS4, including appropriately controlling flow volumes and peak rates. The regulations must be in effect within 3 years of the effective date of this permit.
- The permit does not grant or rescind any property rights. Ecology does not have the authority to address grievances of private property owners who believe they are victims of trespass by stormwater.

- All perennial streams and some intermittent streams are receiving waters, not part of the MS4 (*see Appendix 1 to the permit, Core Element #6*).

RTC # 1.6 Use and Reference to the Stormwater Manuals

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E5, E13, E19, E21, W1, W2, W5, W7, W12, W13, W14, W16, W17, W19, W24, W28, W30, W38, W39, W40, W42

Permit section(s): Appendix 1 of all three permits

Range of comments on the issue:

- The Permit requires application of the 2005 *Stormwater Management Manual for Western Washington* (the manual) in at least in part and depending on interpretation in whole. (W1/E19, W12, W13, W14, W24)
- Requirements to use the Ecology manual throughout the permit are contrary to a previous determination by Ecology that the manual is a Guidance document (see Ecology's Policy statement on the use of the manual). (W1/E19, W13, W14, W24)
- Inclusion of manual by reference can be interpreted to mean the manual is now a full legal part of the permit thereby avoiding the rulemaking process Ecology needs to follow if it is to be anything other than guidance. (W1/E19, W5, W14)
- The manual must not be cited as a standard or a permit requirement until it has gone through the rule making process. (W24)
- The alternative to the use of the manual (the demonstration approach) is too burdensome and the burden of proof is too great and the alternative will still be compared to the Ecology manual. (W1/E19, W7, W14)
- There is no process for phase II communities to submit their alternative manual to Ecology for review and approval. (W14)
- The Permit sets up a dynamic that makes it difficult, if not impossible, for an applicant to apply any other manual to a development site without extensive and expensive justifications that have little chance of making it through an as-yet unknown equivalency review process. (W14)
- Jurisdictions should be allowed to use their current stormwater design manual as a basis for stormwater design. If local jurisdictions do not have a design manual then the technical thresholds in Appendix 1 should apply. (W16)
- Remove all references to the manual and sections from the manual from the permit and appendix other than the manuals minimum requirements, thresholds, definitions, and adjustment and variance criteria. (W2, W12, W28)
- Remove all references to the manual and sections from the manual from the permit and appendix. (W5, W17, W24)
- Level of control specified by the manual has not been demonstrated to be MEP (commenter implies that it goes beyond MEP). (W7, W12)
- Appendix 1 should be guidance and not a permit requirement. (W13)
- The permit cites outside documents such as the "2005 Stormwater Management Manual for Western Washington"; and "*Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments,* Center for Watershed Protection, October 2004." Both documents

are cited as requirements and have not been through a regulatory process such as public review. As such they cannot be mandated as conditions through permit issuance nor serve as regulatory instruments. (W17, W19)

- Ecology must allow that wherever the permittee is directed to outside documents that it is clearly stated that these are recommendations only and that other alternatives or equivalents are offered. References to Ecology stormwater manuals must include language that references only the mandatory sections of the manual, and not the recommended sections or appendices. Permittees are not required to adopt the whole manual by reference alone. Appendix 1 continues to refer back to sections of the manual that are not in the appendices. Ecology needs to ensure that all parts referenced in the Appendix text are contained within the document. (W17, W19)
- Appendix 1 – should be in the permit as guidance! Revise chapter two of the Stormwater Management Manual for Eastern Washington as required. Inclusion of this appendix in this permit, by reference, makes the entire Stormwater Management Manual for Eastern Washington a regulatory requirement instead of a guidance document. (E5, E21)
- Why repeat the guidance given in the Stormwater Management Manual for Eastern Washington by including it in Appendix 1. By including it Appendix 1 of the permit, the Manual is no longer guidance. (E13)

Response to the range of comments:

- The Ecology stormwater manuals are not rules. The manuals have no independent authority and as such are not the underlying basis for permit requirements. The underlying bases are the federal rules that require stormwater controls on new development and redevelopment, and Ecology's decisions concerning the content of the stormwater manuals. The manuals represent an acceptable way to comply with existing state and federal regulatory requirements for managing stormwater runoff from construction sites, and post construction stormwater runoff associated from new development and re-development. All of the permits contain provisions where permittees may directly demonstrate that an alternative approach to the use of the Ecology stormwater manuals will satisfy Federal and State regulatory requirements.
- The use and reference to the stormwater manuals is consistent with the Policy Statement Ecology issued on the use of the Manuals. The Policy Statement published in the Washington State Register (WSR 03-15-091) stated:

> "Federal, state, and local permits may refer to this Manual or the BMPs contained in this Manual. In those cases, elements of the Manual or the Manual itself may become permit requirement only if the authorities and standards under which the permit is issued support such a requirement. It is not permissible or appropriate to include the minimum requirements, thresholds, definitions, BMP selection processes, and BMP design criteria of this Manual as permit conditions or use the Manual as a review standard solely because they are published in the Manual or part of the Manual."

It is appropriate, even expected, that Ecology require use of its best available guidance in a permit that must satisfy federal and state statutory requirements (MEP and AKART, respectively).

- EPA phase II regulations (40 CFR 123.35(g)) require states develop a menu of Best Management Practices to assist phase II jurisdictions in the design and implementation of stormwater management programs. The Ecology stormwater management manuals provide a suite of management practices for construction site stormwater runoff control, post-construction stormwater management at new development and re-development, and source control.
- The two Ecology stormwater management manuals were developed using an extensive public process and represent the best available science on how to properly manage stormwater runoff on a site level. Ecology has determined that the use of Ecology's stormwater manuals at the site level satisfies the state "AKART" standard and the federal MEP standard. Using the Ecology stormwater manuals is not the only way to satisfy the state AKART standard or the federal MEP standard. The permits allow the permittee to demonstrate that an alternative approach will satisfy the state and federal standards at both the programmatic scale and the site specific scale. On a programmatic scale, the criteria for determining whether a local government's manual can be considered equivalent are included in the permit. On a site-specific scale, there must be sufficient information about the stormwater discharge and the receiving water critical conditions to determine whether federal and state technology-based, and water quality-based requirements can be made. Collection and presentation of such information may make this option cost-prohibitive in many common development situations. That is why Ecology developed and encourages use of the presumptive approach in its stormwater manuals.
- Edited versions of the Minimum Requirements from the *Stormwater Management Manual for Western Washington* (2005) and the Core Elements from the *Stormwater Management Manual for Eastern Washington* (2004) have been incorporated into Appendix 1 of each of the Permits. As part of a permit, compliance with the requirements contained in Appendix 1 (or an equivalent approved by Ecology) is a permit requirement. The permits also reference relevant portions of the stormwater manuals which then become permit requirements.
- No information has been provided as part of the public comment period on these permits, or during the development of the stormwater management manuals to indicate that what is contained in Appendix 1 of the permits goes beyond what is AKART, MEP, or is not required to comply with state water quality standards.
- The inclusion of the Minimum Requirements/Core Elements from the Ecology stormwater manuals, and the referencing of the stormwater manuals, does not subvert or avoid public review and comment on the those requirements of the permits. In fact, it is just the opposite: there was a very extensive public review and comment process when each of the two stormwater manuals was developed. Further, the process of developing the municipal stormwater permits includes the opportunity to review, comment and if necessary appeal any permit condition

including permit conditions related to the use/inclusion of the stormwater manuals.

RTC # 1.7 ESA-Related Comments

Note: Comments on these issues were considered together for all three municipal stormwater NPDES permits.

Commenter(s): C6, E3, W30, W39, W40

Range of comments:

- PEER recently released a report on the effect on Puget Sound Chinook Salmon of NPDES Authorized Toxic Discharges as Permitted by Washington Department of Ecology. This report concluded that current controls on pollutants are not adequate to protect threatened or listed species. For this reason the ESA requirements that widespread pollutants be regulated to ensure the continuing survival of the salmon population of Puget Sound must be incorporated into the standards of this permit.
- The Governor's Salmon Recovery Office and the Puget Sound Salmon Recovery plan have both cited stormwater as one of the factors limiting recovery of salmonids listed as threatened under the Endangered Species Act. Recently, NOAA Fisheries scientists have undertaken studies to determine the causes of pre-spawn coho salmon mortality in Seattle urban creeks. Scientists have drawn correlations between rainfall events and high percentages of mortality; mortality rates are also much higher in urban than in rural creeks. These initial findings suggest that stormwater may be a significant cause of high percentages of pre-spawn mortality.
- It is unclear from the material provided from Ecology on this draft permit what type of review will occur by EPA to ensure that the permit complies with the requirements of the Clean Water Act. Further, it is unclear whether §7 consultation with NOAA Fisheries and the U.S. Fish and Wildlife Service will occur to evaluate potential impacts associated with the issuance of this permit. Sierra Club strongly supports close consultation and coordination with these agencies to ensure that the permit is legally sound and protective of aquatic resources.
- In light of the claims challenging the Environmental Protection Agency's failure to consult with federal wildlife agencies, and the probability that EPA will do these consultations, PSA suggests this, and other NPDES permits issued before consultation is completed, contain an explicit "re-opener clause" requiring Ecology to make any changes to the permit at EPA's request through permit modification.

Response to comments:

See also RTC #1 Permit Re-openers

- Ecology agrees more needs to be done to control pollutants in stormwater runoff. Ecology believes these municipal stormwater permits are a necessary and very significant improvement. Both the re-issued Phase I permit and the two Phase II permits require local governments to do a better job of controlling stormwater coming into their storm sewer system.
- Procedures governing the development and issuance of all general permits including these municipal stormwater permits are outlined in Ecology's NPDES delegation agreement with the EPA and EPA regulations. These procedures require Ecology provide both the draft permits and fact sheets to the EPA, NOAA Fisheries and the U.S. Fish & Wildlife Service (the Services) for review but do not require formal

section 7 consultation by Ecology. There have been informal conversations between the EPA, the Services, and Ecology on the draft permits.

- A notice has been iled against the EPA claiming that the EPA is in violation of the federal Endangered Species Act for EPA's alleged failure to consult with the Services over the EPA's oversight of Ecology's NPDES permit program. A formal complaint (lawsuit) has not been filed against the EPA or Ecology/Washington State. The EPA has not requested that Ecology include a "re-opener clause" requiring Ecology to make any changes to the permit at EPA's request through permit modification, and Ecology does not feel such a re-opener is necessary. Ecology does include provisions in all permits allowing the permits to be re-opened based on new information which indicates the cumulative effects on the environment from discharges covered under the permit are unacceptable.

RTC # 1.8 Cross-Border Responsibilities

Note: Comments on these issues were considered together for all three municipal stormwater NPDES permits.

Commenter(s): C9, E3, W7, W16, W36, W45, W49, W53

Comments:

- The draft permit is silent as to how cross-boundary (Idaho and Oregon) issues will be addressed. How will upstream impacts be addressed? By EPA?
- Please provide recommendations on how permittees should implement requirements when the MS4 crosses jurisdictional boundaries.
- Additional Government to Government consultation is necessary.

Responses to comments:

- Cross-border regulation is outside the regulatory scope of this permit. Federal Phase I and Phase II municipal stormwater NPDES regulations apply to all states. Similarly to Ecology in Washington, Oregon has been delegated authority to issue NPDES permits. Idaho is regulated directly by EPA.
- Coordination is required where needed for compliance.
- The following consultations took place between the Draft and Final Permits.
  - Discussions at Ecology Tribal Environmental Council, including briefing by the director of Ecology. (June, November and December)
  - .Briefing at Tribal Water Quality Committee in Port Angeles (June)
  - Offers to tribes for one on one meetings if desired.

RTC # 1.9 Support/Technical Assistance for Secondary Permittees

Note: Comments on these issues were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E20

Comment:

- Please hold workshops especially for smaller entities to share specific information and help them better understand the permit and partner with cities and counties.

Responses to comment:

- Ecology will be developing a technical assistance plan for the permits in the months directly following permit issuance. We will take your comment into consideration and thank you for the suggestion.

RTC # 1.10 Phase II One-Acre Threshold

Note: Comments on this issue were considered together for both Phase II municipal stormwater NPDES permits.

Commenter(s): C1, C4, C5, E3, P4, P7, W7, W9, W10, W30, W39, W40, W44

Range of Comments:

- The 1-acre threshold will not adequately protect water quality, especially where waters are impaired or especially sensitive.
- Many cities have already adopted the Manual thresholds.
- The 1-acre threshold will not meet MEP or AKART.
- Given that it is practicable for Phase 1 communities to use the Manual thresholds, how does the 1-acre threshold meet MEP and AKART?
- Given that the *2005 Stormwater Manual*, which establishes a much smaller development threshold for stormwater treatment and flow control, represents Ecology's best guidance on proper stormwater management, how can the 1-acre development threshold possibly satisfy AKART?
- What is the scientific basis for using the 1-acre threshold?
- The Manual must be used to utilize BMPs.
- Use of the 1-acre threshold will reduce the effectiveness of stormwater management.
- The standard should be consistent, the same for all in these overlapping jurisdictions.
- The Governor's Independent Science Panel found the lower thresholds in the Stormwater Management Manual for Western Washington to be adequate.
- The 1-acre threshold will encourage urban sprawl and lead to degradation of salmon habitat.
- The protection of listed species should be the same regardless of jurisdiction boundaries.
- If the 1-acre threshold is being cited simply because it's a national standard set forth by EPA, it should be reconsidered, since much of the nation has already lost quality fish habitat.
- Because of irreparable habitat damage, a 1-acre threshold for flow control may be more appropriate for Phase 1 communities than Phase 2 communities where salmon still have the chance to survive.
- A decision to use the 1-acre threshold will result in many development projects not receiving the regulatory oversight needed to ensure they are not degrading WQS.
- This does not support the Puget Sound recovery goals by 2020 articulated by the governor and the PS Partnership.
- The federal wildlife agencies have stated that the 1-acre threshold will result in greater effects to listed species and habitat.
- Failing to regulate now will result in costly retrofits in the future.
- It makes no sense to have varied thresholds, especially if construction is taking place on parcels that abut 303(d) listed waters, buffers, or sensitive wetlands. The goal of this item should be to work in tandem with erosion control standards already established in the 20005 Stormwater Management Manual for Western

Washington in order to avoid sedimentary infiltration into MS4's or direct runoff into water bodies during construction operations.
- The same standard should apply to everyone in a watershed.

Response to Comments: Ecology will not allow easing of current requirements to control stormwater on smaller sites in Phase II jurisdictions. Language will be added to the permits clarifying that, just as permittees are required to continue implementing some or all of the SWMP components, permittees whose ordinances regulate new development and redevelopment sites disturbing less than one acre will be required to continue doing so under these permits. Ecology believes that, due to the site plan review and inspection requirements for sites greater than one acre, permittees should have flexibility in determining whether they have adequate resources to review site plans and inspect all of these smaller sites.

RTC # 1.11 Stormwater Basin Planning/Watershed Based Permits

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits.

Note: see also RTC #2 Prescriptive Permits/ Review and Approve SWMPs

Commenter(s): C1, C4, C5, C6, E3, E6, P4, P13, P14, P16, W30, W40, W50

Range of comments:

Watershed based permits

- Recommend watershed based SWMPs, if not this permit term, then in the future. Permit should either require integrated, cooperative watershed-wide, WRIA-scale, SWMPs, or announce the intention to require them in the next permit term. Permit elements that particularly lend themselves to a regional or watershed-wide approach include public education, information collection/management, development review, source control, illicit discharge detection, maintenance inspections and operations, and TMDL implementation.
- Require that all regulated municipalities in a basin be issued one watershed-based permit, and participate in basin or watershed-based plans that address limiting factors from salmon recovery plans.
- Mandate coordination in both the Phase I and Phase II WW permit to better coordinate and regionalize SWMPs. The permit should spell out how this work is to be done.
- Phase I and Phase II stormwater permitting should be coordinated and implemented using a watershed or sub-basin approach – providing uniformity in implementing standards, monitoring protocols, and enforcement.
- The same standards should apply to everyone in a watershed when it comes to water quality – for example TMDL obligations and standards and thresholds in the manual. Perhaps a Puget Sound Basin-wide permitting system is the answer?
- The one-size-fits-all approach provides less flexibility to tailor local SWMPs, therefore, suggest requiring permittees cooperatively develop tailored watershed-based SWMPs.

Basin Planning

- Strongly encourage the use of basin planning to make a better linkage with salmonid recovery plans; predict future changes based on development plans;

identify ways to protect habitat; and prevent and reduce flooding and stormwater effects in a collaborative, landscape-level manner. Recommend monitoring and adaptive management be a part of any basin plan. Support the Independent Science Panel (ISP) recommendations resulting from their review of the manual "that stormwater management and land use planning be integrated and coordinated through watershed-scale planning, assessments, monitoring and adaptive management." Basin planning is necessary to incorporate land cover limits (impervious cover and clearing). Also recommend watershed-based permitting – directly linked to basin planning.

- As the fact sheet acknowledges, the one-size-fits-all approach of this permit "provides less flexibility to tailor local stormwater programs to reflect local priorities and needs." FS, p. 17, ll.19-21. PSA therefore suggests the permit require permittees (both Phase I and Phase II) sharing a basin or watershed to cooperatively develop SWMPs that are tailored to local conditions and priorities.
- Support ISP recommendations on integrating stormwater management and land use planning. The department should require in this permit that Phase I jurisdictions implement basin planning programs, to correct existing problems, and guide future land use development. …could also be used to prioritize habitat acquisition, capital improvement projects, and mitigation strategies. Given that King County, Pierce County and others have begun to conduct basin planning of this sort, why is this not incorporated in the permit, given the requirement to utilize AKART?
- The permit fails to consider or adopt any element of watershed planning or consideration of specific land use issues. Consider Michigan's watershed-based stormwater discharge permit program.
- Permit must require basin planning to address offsite impacts and maintain natural drainage courses.
- Add the coordination requirement that is in the draft Phase I permit to the WW Phase II permit.
- Require or create incentives for Phase II jurisdictions to coordinate on a watershed scale.
- Do not require coordination among permittees.
- Make it clear a permittee is not liable for the action or inaction of others.
- Support coordination measures in Phase I permit.
- Supports coordinating Phase I and II permitting program using a watershed or sub-basin approach. A collaborative watershed model also should define the source of pollutants and outline and implement regional solutions to pollution such as increased setbacks, increased riparian buffers and treatment trains.
- Ecology should develop watershed teams and apply the recently published Ecology guidance on landscape analysis (Stanley, S., J. Brown, and S. Grigsby. 2005. *Protecting Aquatic Ecosystems: A Guide for Puget Sound Planners to Understand Watershed Processes*. Washington State Department of Ecology. Publication #05-06-027. Olympia, WA.).

Combined response to comments:

- A number of comments called for watershed-based SWMPs or issuing permits on a watershed basis. Another group of comments called for requiring stormwater

basin planning or watershed planning. A third group of related comments brought up the issue of coordination among permittees – recommending requiring coordination among all permittees in a basin or watershed, or stating that the permits not require coordination among permittees. One comment recommended that Ecology develop watershed teams and apply the recently published Ecology guidance on landscape analysis.

- It is important to first discuss the issue of scale in responding to these comments. Some comments stressed the need for regional stormwater management at the Water Resource Inventory Area (WRIA) or large river-basin scale. Management at this large watershed scale is useful for integration with salmon recovery plan implementation, and can be more cost effective, particularly for public education, monitoring, and, perhaps, TMDL implementation. At the WRIA scale impervious land cover is a small percentage of the overall land area and its direct effects usually cannot be measured.
- Stormwater basin planning is conducted at the small sub-basin scale, where the effects of impervious surfaces can be measured. Stormwater basin planning is used for:
  - Setting goals for urban receiving water bodies;
  - Identifying equivalent or more stringent requirements for erosion control, treatment, and operation and maintenance; and alternative requirements for flow control and wetlands hydrologic control to help achieve those goals;
  - Assessing potential cumulative effects from new development and designing strategies to prevent or mitigate those effects;
  - Identifying and prioritizing capital construction and other projects needed to correct existing problems; and
  - Designing monitoring to assess the effectiveness of SWMP implementation.
- There are potential benefits to stormwater management at both the WRIA and the small basin scale where participants willingly explore management options, and collaboratively implement solutions.
- Ecology agrees it is appropriate to consider watershed scale integration of SWMPs to enhance stormwater management in a region. There is nothing in the municipal stormwater permits to prevent municipalities from developing watershed based SWMPs. Ecology previously issued watershed-based Phase I general permits and found that the State did not have the resources to support separate watershed based permits.
- Ecology agrees that integrating SWMP development and implementation with Salmon Recovery Plans can enhance the effectiveness and cost efficiency of management programs and actions. It is not appropriate, however, to rely on the municipal stormwater permits for implementation of Salmon Recovery Plans. The jurisdictions that developed Salmon Recovery Plans must be willing to commit to implementation, regardless of the application of a municipal stormwater permit.
- With the exception of the 1 acre threshold for construction/post construction controls, the Western Washington permit sets standardized requirements that municipalities can implement on a regional or watershed basis. The eastern Washington permit sets standardized requirements for all permittees in eastern

Washington, and encourages adoption of regional stormwater management manuals.

- The Phase I permit already requires a coordination mechanism among permittees in a watershed. Ecology has added language to the Phase II permits to encourage coordination.
- Ecology agrees that stormwater basin planning can be a valuable tool to predict future changes based on development plans, identify ways to reduce existing impacts to water bodies, and effectively prevent and reduce stormwater effects. Ecology recommends basin planning as a method to tailor the minimum requirements for new development and redevelopment found in Appendix 1 to the permits. Subject to Ecology review and approval, basin planning may be used to identify equivalent or more stringent requirements for erosion control, treatment, and operation and maintenance; and alternative requirements for flow control and wetlands hydrologic control.
- Off site analysis studies to maintain natural drainage patterns can be done without conducting a full basin plan.
- Ecology's January 2004 report to the legislature (Publication # 04-10-010) recommends that basin planning be considered outside of the permit. None of the comments recommending basin planning present new information to justify making changes to the municipal stormwater permits to make basin planning a permit requirement.

RTC # 1.12 Low Impact Development (LID)

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits.

Commenter(s): C4, C5, C6, E3, P1, P5, P9, P13, P14, P15, P16, P17, W3, W4, W13, W14, W24, W30, W31, W39, W40, W42, W47, W50

Permit section(s): Phase I: S5.C.5.b.iii
W. WA Phase II: S5.C.4.a.iv
E. WA Phase II: S5.B.5.a.ii

Comments on the issue:

- Permits should create incentives for permittees to contribute funding staff time or identify other methods to help ensure that several LID projects are completed within the permit term. (C4)
- Permittees could document their support and participation in these projects and provide annual reports on their implementation and effectiveness. (C4)
- Permit should require the development of ordinances that require the utilization of LID strategies. Believe requiring utilization of LID strategies is necessary to meet AKART and MEP. (C5)
- The permit should establish appropriate LID standards to be incorporated into Permittees programs. (C6)
- Not all sites are suitable for the application of LID strategies – infiltration based LID strategies need suitable soils. (W3)
- Local Governments should be required to review existing codes and regulations for allowance of LID practices, especially impervious surface requirements in the form of wide roads, sidewalks, curbs, and cut-outs. (W4, P17)

- If contractors are to have an "…understanding of low impact development (LID) techniques..." then local governments need a parallel understanding of which local codes, regulations, or design standards prevent the use of LID. (W4, P17)
- Requiring local jurisdictions to allow LID alternatives ignores the serious concerns of longevity, maintenance, access, and soil suitability. The decision to employ/allow LID techniques should be left up to the local jurisdiction. (W14, P1)
- Removing barriers to LID is not enough, the permit should require LID and establish appropriate LID standards to be incorporated into the permittees programs. (W30, W40, P13, P14)
- We support the requirement to allow source reduction approaches such as low impact development and other measures to minimize the disturbance of soils, native vegetation and natural hydrology at development sites. LID practices hold great promise for helping us manage stormwater runoff more effectively. We recommend adding "native" before soils and vegetation to emphasize the need to protect these features in their natural state. (W39, P9)
- Use of LID techniques is already mandated by Minimum Requirement #5 and by referencing chapter 5 of Volume V of the Stormwater Management Manual for Western Washington (SWMMWW). Chapter 5 of the SWMMWW references the Puget Sound Action Team's LID guidance manual. (P5)
- Permittees need a LID standard prepared and approved by Ecology. Without a LID standard we are inviting chaos and it could have a negative effect on water quality. (P16)
- Under good housekeeping measures should include incorporation of low impact development measures for new and re-developed municipal facilities. (E3)

Response to the range of comments:

- The use of low impact development techniques or LID can be very effective in mitigating the effects of new development and redevelopment. In many cases LID techniques may be less costly than traditional methods of managing stormwater runoff.
- Ecology encourages the removal of administrative barriers to the use of LID techniques but does not believe it is appropriate to mandate the use of LID. There are circumstances where the use of LID techniques may not be appropriate due to soils and site constraints.
- Like all stormwater treatment and flow control facilities, proper operation and maintenance of LID techniques are necessary to ensure long term performance. When selecting stormwater BMPs, including LID techniques, both the project proponent and the approving agency should consider the long term operation and maintenance requirements of the proposed BMPs.
- Ecology has incorporated into the Western Washington Continuous Simulation Hydrology Model (WWHM) flow credits for various flow related LID techniques. These credits reflect the expected flow reductions using LID techniques and, depending on the project, result in significant reductions or even elimination of the need for more traditional flow control BMPs.

- The Puget Sound Action Team has published the *Low Impact Technical Guidance Manual for Puget Sound.* The manual is targeted to engineers, planners, developers, builders, architects, landscape architects and other technical staff that design, review, permit and build using LID techniques. The manual provides professionals involved in stormwater management and land development with a common understanding of LID goals and objectives, site assessment and design methods, credits for reducing the size of conventional stormwater facilities, and specifications for individual practices. In addition, the manual provides findings from national and international research and monitoring data to help professionals make informed decisions when using LID techniques in projects.

S1 PERMIT COVERAGE AREA AND PERMITTEES

RTC # 1.13 What jurisdictions should be covered under this permit?

Note: Comments on this issue were considered together for both Phase II municipal stormwater NPDES permits.

Commenter(s): C1, C4, C5, E1, E2, E3, E6, E7, E11, E12, E13, E14, E15, E17, E18 , E19, P7, W1, W13, W15, W16, W17, W30, W33, W34, W36, W37, W38, W39, W40, W45, W49, W53

Permits Affected: both Phase II permits

Permit Section: S1.D.2.

Range of Comments:

- L*imit* the number of entities covered under the permit, specifically do *not* include the Cities of Aberdeen, Anacortes, Centralia, Oak Harbor and Port Angeles, Ellensburg, Moses Lake, Pullman, Sunnyside, and Walla Walla (Ecology was required to evaluate these ten cities for coverage), because:
  - Permit obligations are financially and technically burdensome
  - Ecology does not have the staff to oversee them
- E*xpand* geographic coverage, to prevent water quality degradation, harm to species and the need for costly retrofits later. Specific requests were made to *include*:
  - The Cities of Aberdeen, Anacortes, Centralia, Oak Harbor and Port Angeles, Ellensburg, Moses Lake, Pullman, Sunnyside, and Walla Walla,
  - The City of Ridgefield.
  - Urban Growth Areas of the Cities of Aberdeen, Anacortes, Centralia, Oak Harbor and Port Angeles, Ellensburg, Moses Lake, Pullman, Sunnyside, and Walla Walla, as the permit covers these areas for all other Phase II cities (which means adding Grays Harbor, Lewis, Island, Clallam, Kittitas, Grant, and Whitman Counties; and amending the areas of permit coverage for Skagit, Yakima, and Walla Walla Counties),
  - The whole Puget Sound Region, due to the impairment of Puget Sound,
  - The City of College Place and Walla Walla County (for effective stormwater management together with the City of Walla Walla),
  - City of Blaine (for stormwater discharges contributing to the downgrade of commercial shellfish growing areas in Drayton Harbor.

- City of Port Townsend (for its extensive marine shoreline and potential adverse effects of stormwater discharges on salmonids threatened with extinction that use the city's shoreline area).
- City of Sequim (for stormwater discharges to Sequim Bay and the lower Dungeness River, both of which contain shellfish growing areas).
- City of Shelton (for stormwater discharges to shellfish growing areas in Oakland Bay and the development of a TMDL for Goldsborough Creek for fecal coliform bacteria. The creek runs through the city).
- The Belfair Urban Growth Area (for discharges to shellfish growing areas and areas of low dissolved oxygen in Hood Canal and for stormwater discharges named in a TMDL for the Union River; the river runs through the community),
- The Town of Ridgefield (for discharge into sensitive waters), and
- The industrialized Kent Valley.

Response to Comments:

Note: see also RTC #1.14 Petition process and criteria

- Pursuant to federal regulations, Ecology developed criteria to determine whether stormwater discharges from MS4s (municipal separate storm sewer systems) outside the federally mandated coverage area were causing or contributing to, or have the potential to cause or contribute to, violations of water quality standards, including impairment of designated uses and/or adverse habitat or biological impacts (40 CFR 123.35(b). Ecology applied this designation criteria to small MS4s located outside of Urbanized Areas with populations of 10,000 or more.
  - Ecology was required, under the federal Phase II regulations, to evaluate the cities of Aberdeen, Anacortes, Centralia, Oak Harbor, Port Angeles Ellensburg, Moses Lake, Pullman, Sunnyside, and Walla Walla. Based on recommendations made by EPA in the phase II rule proposal, Ecology considered discharge to sensitive waters, high population density, high growth or growth potential, contiguity to an urbanized area, significant contribution of pollutants to waters of the US, or ineffective protection of water quality by other programs. Ecology involved these cities in developing designation criteria and tentatively determined that all of the cities should be designated as regulated small MS4s.
  - Ecology also agreed to evaluate additional information submitted before the close of the public comment period regarding actual discharge points of the MS4, estimated populations served by the MS4 versus UIC (underground injection control) facilities or other stormwater disposal methods not discharging to surface waters, and/or a description of the jurisdiction's current stormwater management program. Of the bubble cities, only Port Angeles and Pullman submitted additional information, contesting their inclusion under the Phase II permits.
- Ecology has decided that coverage under this permit will not be extended to additional areas. All of the cities and counties listed in S1.D.2 were notified when the federal rules were published in 1999 that they might be covered under this permit, and they have had time to prepare funding and other implementation

mechanisms. For this and other administrative reasons, Ecology has decided not to include additional jurisdictions for coverage under the permits at this time.

- The industrialized area of Kent Valley that is located in unincorporated King County is covered under the Phase I permit, and the parts located in cities in S1.D.2 of the Phase II permit for western Washington are covered under that permit.

Should Pullman be included as a regulated small MS4?
Commenter(s): E3, E6, E11, E12, E17, E19
Summary of the Range of Comments:

- Support Ecology's decision to include Pullman in this permit; it will benefit water quality.
- Uncontrolled stormwater runoff from new development in Pullman causes water quality problems and property damage; this permit will force the city to enforce water quality laws.
- Do not include any additional cities in the permit; Ecology has limited resources to implement.
- This permit will not result in environmental benefit; no improvement in water quality for the Pullman area.
- Which criteria did Ecology use in tentatively determining that Pullman should be a regulated small MS4: the criteria found in NPDES Phase II Designation Criteria for Small Municipal Separate Storm Sewer Systems, Proposed Draft, 7/27/04, or Draft Phase II Permit for Eastern Washington, Formal Public Comment Draft Fact Sheet, 3/22/06?
- The Draft Phase II Permit for Eastern Washington states that Ecology will make a case-by-case determination whether a city will be a "regulated small MS4." The language of the Phase II Permit implies that such designation will be determined if Criteria 1 or 2 and Criteria 3 or 4 are met or if Section B. Additional Designation Criteria are met. These criteria are not Environmental Protection Agency (EPA) requirements.
- Criterion 1 is not met: "Impaired waters" are defined as those identified on the CWA Section 303(d) list. Water bodies can be and are listed based on old and incomplete data. In the case of the South Fork Palouse River (SFPR), it was listed based on data ranging from 1987 to 2003 with the majority of the data being over 10 years old. The surrounding areas both preceding and following Pullman's contact with the South Fork of the Palouse River are agricultural in nature and exempt from regulation under the act. These areas are substantial and probably primary contributors to any pollution reaching the river. Ecology has announced plans to conduct a Total Maximum Daily Load (TMDL) comprehensive drainage basin study. This study will be completed in 2009, and it is intended to provide the scientific data needed to make the determination required in Criteria 1. Ecology affirmed that the TMDL study is intended to provide the science to determine the flow and contaminant sources for the SFPR, Paradise Creek and other tributaries. Until the TMDL study is complete, it would be arbitrary for Ecology to determine that this criterion is satisfied with respect to the City of Pullman and WSU stormwater discharges; there is not sufficient scientific

analysis to make a determination that the MS4 is discharging to "impaired waters" compared with waters outside of Pullman. The SFPR does not constitute "sensitive waters" as that term is described in the criteria. The description is expressly not binding but if applied as written clearly does not apply to the SFPR. There are no or insufficient scientific facts at the present time upon which Ecology can make a determination that the portions of the SFPR to which the City of Pullman/WSU stormwater is discharged are impaired or sensitive waters as compared to the waters outside of Pullman. Including Pullman as a regulated small MS4 is premature and will have no significant impact on improving the quality of the river.

- Criterion 2 is not met: Criterion 2 states that Ecology will determine whether an MS4 is a significant contributor of pollutants to waters of the United States using the "best available science and readily available information," and includes specific types of information: water quality monitoring data, landscape metrics such as total impervious surface area, road network density, or number of stream crossings by roads, and quantification of the vehicular traffic in the MS4 at levels that would correspond to a high pollutant loading in stormwater discharges. There is not sufficient scientific analysis to make a determination that the MS4 is a "contributing source of pollutants" of interest to the SFPR based on these first three types of information listed. A fourth type of information refers to "other indications of increased potential for stormwater pollutant loading" and specifically addresses large non-resident population commuters and university students. WSU has a relatively small number of students who commute by car. Rather than being a "commuter college", it is a "residential university" where 35% of all undergraduates live in campus housing, a very high percentage compared with other large public universities. Many other students live within walking distance of the campus. The Pullman transit system which is partially funded by WSU as a high number of student riders, and is one of the best transit systems in the state. This further reduces the number of commuter vehicles that could have impact on stormwater pollutant loading. Regional topography, soil types, and agricultural practices are by far the greatest contributor to the water quality of the SFPR. These factors are not within the control of Pullman or WSU and exist almost exclusively before the SFPR enters Pullman and after it leaves Pullman. The TMDL study will no doubt document that the stormwater discharges in Pullman/WSU do not contribute materially to the quality of the water in the SFPR.
- Criterion 3 does not apply: Does the MS4 serve a substantial population or area? Pullman's population (including WSU) is currently estimated at approximately 25,000, more than 18,000 of whom are students attending WSU and most of whom do not reside in Pullman all year. There has been no showing that Pullman serves a substantial population or area. Additionally, there is inadequate evidence to conclude that Pullman has a high population density, high growth, or high growth potential. If the population were to be considered on an average annual basis, the City of Pullman would be significantly below the technical threshold established by Ecology, which is 25,000. Pullman is already below the federal

standard (50,000) set by the U.S. Environmental Protection Agency for inclusion as "regulated small MS4s".

- Criterion 4 does not apply: Pullman, WSU and all other portions of the city are not contiguous to any urban area.
- Section B does not apply.
- Section C applies to WSU: WSU has taken significant steps to improve our overall stormwater management. WSU cleans its stormwater catch basins annually and is developing plans for stormwater pipe cleaning every 3 years. WSU has begun signing all storm drain inlets with 'No Dumping, Drains to River' badges and is approximately complete. WSU's Environmental Health and Safety department is developing a Stormwater Fact Sheet Pamphlet available on its website. WSU complies with all current state and federal construction stormwater management requirements; and WSU incorporates stormwater management features into the design of capital projects on campus. WSU would be happy to meet Ecology representatives to evaluate our stormwater discharge policies and practices. If you find them lacking to any significant degree, we would be also willing to address with you the steps to improve them.
- Ecology plans to begin conducting a Total Maximum Daily Load (TMDL) comprehensive drainage basin study this summer and completing it by 2009. We were, until quite recently, unaware of this proposed activity and how it was initiated. We remain today still unaware of the details and request a documented chronology of origins of it. If this study is to go forward, we recommend that inclusion of Pullman, Washington State University, or any other jurisdiction within this area be delayed until scientific data is available to justify such inclusion.
- In the *Municipal Stormwater NPDES Report to the Legislature January 2004* submitted by the eastern Washington stormwater group (referenced in the permit fact sheet) a number of common themes and perspectives were outlined, some of which are highlighted below and are especially relevant to Pullman:
    1. Many eastern Washington jurisdictions will have significant difficulty paying for the required stormwater management program.
    2. The permit should be written based on the minimum federal requirements.
    3. Requirements should be developed to maintain equity to businesses.
    4. Compliance should be based on meeting narrative, not numerical standards.

  These concerns are further justification for not including Pullman in Phase II at this time
- We request that the results of the TMDL study determine when, and if, Pullman should be included in the future. Pullman is surrounded by large non-point sources. We are eager to understand the proportional pollutant loads when considering such large non-point sources as agricultural in our area. One of the concerns expressed to the legislature early on in this process is that the permit requirements "Needed to provide meaningful environmental benefits. – permit fact sheet". If Pullman's water quality impacts from municipal stormwater are a drop in the bucket relatively speaking then that needs to be factored into future water quality management decisions for the South Fork of the Palouse. This will

be determined during the TMDL and load allocation process, which may not require any reduction in loading from the municipal stormwater system. In fact, the permit fact sheet states "None of the TMDLs to date established load allocations or waste load allocations for municipal stormwater discharges covered under this permit." The South Fork of the Palouse is an extremely complex system and our limited financial resources need to be expended to gain the most benefit.

- Pullman and the surrounding area are characterized by rolling hills, steep slopes and highly erodible soils. The relative impermeability of the soil virtually eliminates the use of infiltration for stormwater treatment, which results in close to 100% runoff. Agriculture is the primary land use in the surrounding area, and results in highly turbid runoff far outweighing contributions from the city stormwater system. Benchmarks such as the 25 NTU threshold in the Construction Stormwater General Permit are essentially impossible to meet at times, and quite frankly wouldn't matter much because the contribution from agricultural land is so much higher, both in quantity and turbidity levels.

Response to the Range of Comments:

- Ecology has determined that Pullman is a regulated small MS4. Both the city and WSU will be required to have permit coverage and implement the requirements of the permit.
- Ecology acknowledges that stormwater is not likely the primary cause of water quality problems in the South Fork Palouse River. However, it is likely a contributing factor, and the stormwater contribution to all of the receiving waters in the Pullman area is growing. One of Ecology's goals for this permit is to reduce impacts from new development. Ecology believes that the regulatory controls on new development and redevelopment will benefit water quality in the Pullman area.
- Ecology agrees with the commenter that the "designation criteria" are not EPA requirements. However, developing and applying criteria is an EPA requirement, and Ecology's criteria are based on draft criteria developed by EPA Region X. The criteria are actually a number of factors that Ecology took into consideration in making its decision. Ecology appropriately exercised both its responsibilities and its discretion in designating Pullman as a regulated small MS4.
- The "designation criteria" are not in the fact sheet, but on page 18 there is a discussion of the evaluation process. The 7/27/04 draft was revised based on comments received from the cities to be evaluated (including Pullman), and the version used to evaluate Pullman (and the other nine cities, for a total of five each in eastern and western Washington, to which Ecology was required to apply the criteria) is included in Ecology's response to comment #1.14. Most of the changes from the 7/27/04 version were to Section II, Part C, adding requested detail under the exemption criterion. Ecology did not set any new population "thresholds" but rather used those set by EPA. Ecology compared growth rates with the state average.
- Here is how the designation criteria were applied to Pullman (and the other nine cities):

  - For Part II.A, all ten of the cities are small MS4s with population >10,000 and density >1,000/mi^2 so criteria 3 and 4 were not applied and only criteria 1 and 2 were applied. (Ecology does note, including the student population of WSU which resides in Pullman for the majority of the year, Pullman has a population of more than 25,000, and thousands of others journey to Pullman for employment, football games, graduation, and other events.)
  - Part II.B does not apply to these ten cities; and
  - Part II.C, the Exemption Criterion, applied to these cities only if they provided us with detailed information on their stormwater management program before the close of the comment period on the permit (no E WA cities did, and the activities described by WSU, while commendable, constitute only portions of the Stormwater Management Program required by this permit).
- Here is how criteria 1 and 2 were applied to Pullman: There are 303(d) listed water bodies in Pullman, and the MS4 likely discharges not only to the South Fork Palouse River (SFPR), Paradise Creek, and Missouri Flat Creek but also to numerous other, smaller surface water bodies. Ecology acknowledges that the stormwater contribution to the impairment of SFPR and Paradise Creeks is probably small in comparison to other sources. However, due to Pullman's population and growth rate and the fact that stormwater is not easily infiltrated through the loess soils, Pullman's MS4 is likely a substantial contributor of pollutants to each of the local water bodies. In making this determination, Ecology considered rainfall, streamflow, and typical concentrations of pollutants in stormwater. Pollutants typically of concern in stormwater are broader than the list of pollutants for which the creeks in the Pullman area are listed. Recent sampling indicates that dieldrin and PCBs are specific constituents of concern in Pullman's stormwater that need to be addressed.
- Ecology acknowledges and supports Pullman's and WSU's efforts at reducing commuter traffic and believes those efforts benefit water quality and should continue to be included in the Stormwater Management Program.
- Pullman's request to await the results of the TMDL study is reasonable and understandable. However, in light of preliminary sampling results and Ecology's global understanding of the water quality impacts of stormwater, the TMDL is more likely to result in additional specific actions that need to be taken to address the legacy pollutants in Pullman's stormwater. The basic Stormwater Management Program required in this permit will still be appropriate for Pullman to develop and implement.
- Ecology understands that implementing this permit will be challenging in different ways for nearly all of the Phase II communities in eastern Washington.
- Runoff treatment technologies in the *Stormwater Management Manual for Eastern Washington* (2004) applied to sites that meet the minimum requirements in Appendix 1 of this permit are appropriate for areas where stormwater cannot be infiltrated and will benefit water quality.
- The 25 NTU benchmark in the Construction Stormwater General Permit is not included in this permit.

Should the City of Port Angeles be excluded from coverage under the permit?
Commenter(s): W33
Range of Comments:

- The City does not meet the defined criteria of "Urbanized Areas" which specifies population centers with a greater than 50,000 people and densities of at least 1,000 people per square mile.
- The City should not be included in Phase II until the UGA, Clallam County and the Olympic National Park surrounding watershed areas are also included.
- The City should not be included in Phase II for being on the 303(d) list since they have no regulatory control over the problems listed.
- The City should not be included until funding is provided by the state or federal agencies.

Response to Comments:

- Ecology was required by the federal regulations to evaluate all cities with populations of 10,000 or more. According to the 2000 census, Port Angeles has a population of 18,397.
- The urban growth areas of Clallam County will not be included in this permit. National parks if they need to be permitted are permitted by the EPA.
- The consideration in evaluating protecting water bodies was a determination of whether they were sensitive waters, not whether the jurisdiction where they were located had regulatory control.
- No MS4s would be regulated if determinations depended on state and federal funding.

RTC # 1.14 Petition Process to get additional areas covered under the permits

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits issued.
Commenter(s): E3, W30, W40, also raised during public workshops
Range of comments on the issue:

- The permit or fact sheet should explain the petition process for inclusion of additional entities into coverage by the permit; suggested permit language:

  Any person may petition the Department of Ecology to evaluate a municipal separate storm sewer for the need to obtain permit coverage. The petition shall contain relevant information to assist the Department in this evaluation. In response to a petition, the Department may perform an evaluation of the municipal separate storm sewer system for which the petition is received. If the evaluation indicates that a municipal separate storm sewer contributes to a violation of water quality standard or if the sewer system is in a rapidly developing watershed, Ecology shall require that the sewer system obtain coverage under this program.
- The permit should contain a specific reference to 40 CFR 122.26(f)
- Add to the evaluation criteria: the presence of listed species, critical habitat, areas currently unoccupied that are important for the recovery of listed species

Response to comments: Ecology agrees that the permits should include a description of the process for third parties to petition Ecology to cover additional entities under the permits. As part of developing and issuing the Phase II permits, Ecology was required, pursuant to 40 CFR 123.35(b), to develop and apply evaluation criteria to determine whether these permits would cover the cities of Aberdeen, Anacortes, Centralia, Ellensburg, Moses Lake, Oak Harbor, Port Angeles, Pullman, Sunnyside, and Walla Walla.

Ecology plans to apply the same factors to other entities if third parties petition Ecology to cover them under a permit. A "complete petition" submitted by a third party would provide Ecology with information on each of the relevant factors. The factors are posted on Ecology's website at http://www.ecy.wa.gov/programs/wq/stormwater/municipal/index.html and are listed below:

The factors Ecology will consider in evaluating municipal separate storm sewers include, but are not limited to, the factors listed below. Ecology's evaluation will be on a case by case basis, and in the exercise of its discretion Ecology may rely on other factors to evaluate municipal separate storm sewers. The factors listed below are provided to give potential petitioners guidance regarding the factors Ecology will typically consider, but are not intended to restrict Ecology's exercise of its discretion.

Factor 1: Does the municipal separate storm sewer discharge stormwater to impaired or sensitive waters?

Ecology will consider whether the municipal separate storm sewer discharges to impaired or sensitive waters that need protection to maintain or restore uses.

- *"Impaired waters" are Clean Water Act section 303(d)-listed water bodies.*
- *"Sensitive waters" include public drinking water intakes and their designated protection areas; designated public swimming areas; shellfish beds; State-designated Outstanding Resource Waters; National Marine Sanctuaries; State Aquatic Reserves; and waters determined to be critical habitat for threatened or endangered species.*

Ecology will also consider whether stormwater management practices are likely to contribute to the necessary protective and/or restoration measures for the water body of concern, e.g. if the impairment is due to a constituent of concern in stormwater. Constituents of concern in stormwater typically include: arsenic, cadmium, copper, chromium, lead, zinc, heat, oil and grease, organic toxins, oxygen-demanding organics, nutrients, sediments, bacterial/viral agents and other pathogens.

Factor 2: Is the municipal separate storm sewer a significant contributor of pollutants to waters of the United States?

Ecology will consider whether the activities that take place in the municipal separate storm sewer contribute a loading of pollutants that are considered to be sufficient to cause or exacerbate the deterioration of receiving water quality or instream habitat conditions. This consideration will be based on best available science and readily available information. The types of information or metrics that may be considered and applied include, but are not limited to:

- *Water quality monitoring data;*
- *Landscape metrics such as total impervious surface area, road network density, or number of stream crossings by roads;*
- *Quantification of the vehicular traffic in the municipal separate storm sewer at levels that would correspond to a high pollutant loading in stormwater discharges;*
- *Other indications of increased potential for stormwater pollutant loading, including a large non-resident population (such as seasonal or year-round tourism, university students, adjacent military bases, or other types of commuters) or high-use commercial traffic areas.*

Factor 3: Does the municipal separate storm sewer serve a substantial population or area?

Management of stormwater runoff from growing municipal separate storm sewers is a primary goal of the regulations. High growth may be measured by a rate of increase in population, or directly by the number of people added, or by the increase in the amount of impervious surfaces in the municipal separate storm sewer. Ecology will evaluate whether the municipal separate storm sewer has experienced high growth by one or more of the following measures:

- *Residential population has grown or is projected to grow by a rate of 15% (the average rate of growth in Washington State from 1990-2000) or more within a 10 year period; this applies only to municipal separate storm sewers serving a minimum population of 1,000.*
- *The municipal separate storm sewer is projected to serve a population of 10,000 or more outside an Urbanized Area, or a population of 1,000 or more inside an Urbanized Area, when the next census takes place. (Note: Municipal separate storm sewers that met this criterion for the 2000 census have already been designated by Ecology as regulated municipal separate storm sewers.)*
- *The amount of total impervious area served by the municipal separate storm sewer has increased by a rate of 10% or more within a 10 year period; this applies only to municipal separate storm sewers serving a minimum population of 1,000.*

Ecology's determination will be based on the best available information, including the latest U.S. Census Bureau or State of Washington Office of Financial Management data.

Factor 4: Is the municipal separate storm sewer contiguously located to an already regulated municipal storm sewer?

Potential impacts on a neighboring regulated municipality and shared water bodies will be considered for jurisdictions that are directly adjacent to an already regulated municipal separate storm sewer.

Factor 5: Is the municipal separate storm sewer physically interconnected to another, already regulated municipal storm sewer?

If a municipal separate storm sewer is physically interconnected to another municipal separate storm sewer that is regulated by the NPDES stormwater program and contributes substantially to the pollutant loading in the regulated municipal separate storm sewer, then it must be designated as a "regulated

municipal separate storm sewer." Ecology will determine whether the physically interconnected municipal separate storm sewer contributes substantially to the pollutant loadings of the already regulated municipal separate storm sewer.

To determine whether a physically interconnected municipal separate storm sewer is a "substantial contributor" to the regulated municipal separate storm sewer, Ecology will consider the following factors and any other factors Ecology's determines are appropriate:

- *The total contributing area of the candidate municipal separate storm sewer;*
- *What portion of the receiving regulated municipal separate storm sewer's discharge is contributed by the interconnected candidate municipal separate storm sewer; and/or*
- *What portion of the municipal stormwater discharge to the receiving water body is contributed by the interconnected candidate municipal separate storm sewer.*

<u>Factor 6: Are the water quality impacts of the municipal separate storm sewer already being addressed under other regulations or programs?</u>

A designated "regulated municipal separate storm sewer" may be determined to be exempt from the requirement for permit coverage if the stormwater runoff from the municipal separate storm sewer is effectively addressed by other water quality programs. Ecology will consider, on a case-by-case basis, whether the stormwater runoff from a potentially designated "regulated municipal separate storm sewer" is effectively addressed under other regulations or programs. Information in support of this criterion should be provided directly to Ecology by the candidate municipal separate storm sewer and should include a description of each of the following elements of the stormwater management program to prevent and minimize pollutant runoff:

- *Public education and involvement: actions to promote greater understanding and support of stormwater management activities among various audiences within the local community and to involve them in the program planning process.*
- *Illicit discharge detection and elimination: actions to identify and reduce non-stormwater discharges to the municipal separate storm sewer.*
- *Construction stormwater runoff control: specific actions to prevent discharge of sediment and other construction-related pollutants from entering the municipal separate storm sewer.*
- *Post-construction stormwater management: specific actions to control stormwater runoff from new development and redevelopment projects.*
- *Pollution prevention and good housekeeping for municipal operations: specific actions to reduce pollutant loading in stormwater runoff from publicly-owned roadways, parking areas, maintenance and storage yards, waste transfer stations, parks, and other areas.*
- *Special actions to address local water quality problems, such as monitoring, retrofitting, or basin planning, being undertaken by the jurisdiction.*

- *Record-keeping and program evaluation to adaptively manage the program and report to the public on stormwater management activities.*

The descriptions should include budget and staff allotments, scheduled inspection and maintenance activities, and copies of adopted ordinances or other rules supporting the actions.

RTC # 1.15 S1.A Geographic extent of coverage

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E1, E7, E13, E15, E18, W8, W11, W34, W35, W42, W47

Comments:

Geographic extent of coverage for secondary permittees

- The formal draft permit language requires secondary permittees to apply the permit "throughout the land areas served by and under the effective control of the entity." The permit should limit the geographic area of coverage for secondary permittees to the Urbanized Area, particularly due to the size and extent of irrigation districts.
- The geographic area could be limited to the drainage system serving a bubble city
- Reduce the administrative efforts of port districts

Geographic extent of coverage for cities

- Coverage area is not the entire jurisdiction because the entire jurisdiction is not served by the MS4. Clarify language to avoid unnecessary litigation by third parties.

Geographic extent of coverage for counties

- Both municipal and non municipal UGAs associated with urbanized areas should be covered by counties.

Response to Comments:

Geographic extent of coverage for secondary permittees

- Ecology agrees that many irrigation districts serve extensive areas and land uses that are outside of the scope of this permit. Some other types of secondary permittees may be similarly extended. For most permittees, coverage should be limited to the geographic areas otherwise regulated by the permits. However, for some secondary permittees such as ports and universities, Ecology believes it makes sense to apply the permit requirements throughout the contiguous area served by and under the effective control of the entity; other discrete areas operated by these permittees outside the area otherwise regulated by the permit should not be included. In addition, since secondary permittees may own or operate MS4s in areas subject to more than one municipal stormwater permit, Ecology has added a provision allowing secondary permittees to obtain coverage through a single application.

Geographic extent of coverage for cities

- *See RTC #20 on S2 Authorized Discharges*. This permit only applies to discharges to and from the city's MS4. The permit section clarifies the geographic area of coverage for the MS4. No language changes are needed.

Geographic extent of coverage for counties

Ecology concurs.

RTC # 1.16 S1.C Non-residents affecting an MS4

Note: Comments on this issue were considered together for both Phase II municipal stormwater NPDES permits.

Commenter(s): E11, W13, W17

Comments:

- In S1.C.2.c., use of the word "commuter" should be changed to "and any non-residents regularly employed in the area served by the small MS4."
- Many university students do not own cars, live in campus housing, and/or are served by the transit system.

Response to Comments:

- The proposed change does not increase clarity and is no easier to verify. Ecology will leave the language as it is.
- Ecology encourages alternative transportation for all residents and non-residents served by the MS4 and this can be part of the SWMP. There are many factors one could consider when addressing population impacts on vehicle use. For example, special functions such as football games may draw thousands of additional vehicles. Both daily and seasonal use levels are important to address in developing the SWMP.

RTC # 1.17 S1.D Program sharing relationships

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E7, E12, E15, W16, W36, W37

Comment:

- Permittees should be able to work out program sharing relationships during the permit term. The permit currently reads that an MOU must be submitted with the application or soon after. Permittees should not have to figure this out prior to applying for the permit.

Response to Comment:

- Ecology agrees that the timing for working out arrangements to share program implementation responsibilities should not be tied to the timing of submitting an application.

RTC # 1.18 Cover all facilities owned by a permittee, even if located in another municipality

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits.

Commenter(s): C1, P1, P3, P6, P7

Comments:

- Revise S1 to say that Phase I permit coverage applies to MS3s owned or operated by the Phase I permittees, including MS3s located in areas subject to the Phase II permit. Phase I coverage should apply to all these MS3s without an additional application or different SWMP requirements.

Response to Comments:

- Ecology agrees with the comment

RTC # 1.19 Do not cover areas served by CSOs

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E14, W33

Range of comments on the issue:

- Cities are overburdened by CSO costs
- Some stormwater BMPs are not necessarily applicable in CSO areas; modify language to allow flexibility

Response to the range of comments:

- The federal definition of MS4 does not include areas served by CSOs; therefore areas served exclusively by CSOs are not regulated by the permit. No change to the permit language is needed.

S2 AUTHORIZED DISCHARGES

RTC # 1.20 S2 Authorized Discharges

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Note: see also RTC #21 Non-Stormwater Discharges and RTC #22 Compliance with Standards

Summary of issues: What discharges are authorized by/regulated by this permit? To what extent must discharges into the MS4 be controlled by the permittees?

Commenter(s): C1, C3, E4, E5, E8, E10, E13, E14, E16, E21, P2, P3, P4, P5, P6, P7, P11, W2, W3, W7, W12, W13, W14, W17, W18, W24, W28, W42, W50, W51

Range of comments on the issue:

General comments on this section:

- Provide a clear linkage between S2, S4, and S5
- The permit should clearly authorize the discharges that will, in fact, occur
- The permit should address pollutant concerns with effective prohibition and a strong BMP program
- This section should be based on proper exercise of municipal authority and MEP (emphasis on *practicable*)
- The draft language can be read as denying permit coverage (authorization) to certain municipal stormwater discharges, e.g. requiring a permittee to guarantee NPDES permitting or elimination of flows from a property over which the permittee has no control. Others must meet their regulatory obligations in order for a permittee to meet theirs; this is an unfair and improper burden on a permittee.

S2.A *Comments:*

- Delete "into" from S2.A.1. Municipalities are only responsible for discharges from their MS4s. CWA regulates discharges from the system, not into it. How can permittees demonstrate that all discharges into their system are in compliance with the permit? Potentially sets up liability for discharges from private property into the public system.
- Suggest moving S2.A.1 to S4

- Delete "waters of the state" and replace with "*waters of the U.S.*" or "waters of the state *that are also waters of the U.S.*" to clarify that waters of the state that are not waters of the U.S. are covered only state authorities, and not under the CWA.
- Delete S2.A.2. These discharges do not require permits other than NPDES permits. New construction of stormwater systems is permitted though construction permits; this should not be in this permit.
- Delete entire section and replace with: "*This permit authorizes the discharge of stormwater to surface waters and to ground waters of the state from MS3s owned or operated by each permittee covered under this permit pursuant to S1.A. Authorization covers all new and existing discharges from existing MS3s, and discharges from all MS3s constructed after the effective date of this permit that have received all applicable state and local permits, including compliance with Ch 43.21C RCW (the State Environmental Policy Act). Discharges to ground waters of the state through facilities regulated under the UIC program, Ch 173-218 WAC, are not covered under this permit. Discharges to GW of the state not subject to regulation under the CWA are covered in this permit only under state authorities, Ch 90.48 RCW, the WPCA.*"
- Delete the reference to ground water (all of S2.A.4). The federal definition of MS4 and the definition in the permit only include discharges to surface waters. The UIC program regulates GW discharges, don't combine the two. Requiring permittees to regulate GW discharges increases the liability of the permittee, compliance costs, and the scope and complexity of this permit. This is an important policy decision by the agency and needs to be carefully considered.
- Explain why this permit regulates GW discharges
- It would be more efficient if discharges to Class V wells were regulated under this permit instead of by rule under the separate UIC program
- Thank you for resolving most of the issues between these permits and the UIC regulations that existed at the time of the preliminary draft.
- Reword S2.A.1: "All discharges into and from MS4s that discharge *to surface waters of the state and that are* owned or operated by the permittees must be in compliance with this permit."
- Are discharges to rock sumps and roadside grassy swales that are not UIC facilities covered under this permit? The sumps have no pre-treatment and mapping them and the discharges to them would be difficult. We include grassy swales in the UIC inventory. Clarify S2.A.3: "Discharges to ground waters not subject to regulation under the CWA, *except discharges to ground waters that receive pre-treatment comparable to accepted BMPs under the UIC program*, are covered in this permit only under state authorities."
- To clarify intent in S2.A.4., change "under the federal Clean Water Act" to "under the federal rules" because UIC authority is in the Safe Drinking Water Act

S2.B *Comments:*

- Does this mean that stormwater associated with construction or industrial activity of the MS4 agency as well as such activity by private dischargers to the MS4 will require separate NPDES permits? If that is the intent, please clarify the language.
- The way this is worded a permittee would be out of compliance if a single un-permitted industrial discharge to the MS4 were occurring

- If the concern is about these dischargers discharging contaminants into the MS4, appropriate authority exists under proposed condition S.5.C3.b which would require the permittee to take appropriate enforcement and other actions against the discharger in the event they are illegally discharging to the MS4
- Delete "only" and add the following paragraph to the section: "*Notwithstanding the foregoing, the Permittee shall not be held in violation of this permit if, in the course of monitoring industrial and construction activities, the Permittee identifies a facility or site that is discharging stormwater associated with construction or industrial activity, as defined by 40CFR122.26, into the municipal separate storm sewers without a separate individual or general NPDES permit. In such cases the Permittee shall notify Ecology, or the appropriate permitting agency, of the identified site.*"
- Delete entire section and replace with: "*This permit authorizes discharges from flow that is authorized by a separate NPDES permit*."
- Delete S2.B.1 Not a MS4 NPDES permit. These are separate NPDES permits and should not be included.

S2.C *Comments:*

- Delete the portion of the sentence that reads "unless the discharges from fire activities are identified as significant sources of pollutants to waters of the State"
- Emergency firefighting activities should be allowed without condition
- Allowed discharges from firefighting activities should include all firefighting activities, not just emergency activities

S2.D *Comments:*

- A permittee cannot guarantee that others will not illegally discharge into its MS3. MEP in this case is that a permittee can regulate others, communicate with Ecology when it learns of a need for NPDES permits, and comply with the IDDE program in S5/S6.
- Delete and replace with: "*Discharges from MS3s owned or operated by a Permittee that are composed of non-stormwater or stormwater associated with industrial and construction activity are authorized when the permittee generally complies with* [S5 section on Illicit Discharge Detection and Elimination] *to prohibit non-stormwater discharges into MS3s owned or operated by the permittee, to the extent and in the manner required by that section of the permit*." The word "generally" is inserted to avoid the unrealistic interpretation that the permittee must have, in fact, discovered and initiated enforcement against every potential violator.
- Section D in the 1995 [Phase I] permit stated that the permit did not authorize discharges to waters on trust lands of the Puyallup Tribe. This language is now missing. Does this imply that any discharges we make into the Puyallup River in sections controlled by the Tribe are authorized by this permit? Why was this section taken out? Are other tribes now delegated as well, and do they need to be included in the permit? The language in the 1995 permit is adequate for this distinction.
- Replace "entities" with "*responsible parties*"

Response to comments:

- Ecology agrees that some changes to S2 will provide clarity. Other changes will need to be made in other sections of the permits to answer other questions such as the intended mapping requirements in the IDDE section. Specifically, changes will be made to the permits to specify how both stormwater discharges and limited non-stormwater discharges are authorized by this permit. Ecology believes that the revised language will make it clear how a permittee complies with the permit, and that the permit requirements are realistic in addressing which flows into the MS4 the permittee can control.
- Permittees control discharges *from* their MS4s primarily (and in most cases, exclusively) by controlling discharges *into* their MS4s to the maximum extent practicable. The approach of controlling discharges into a permittee's MS4 was directly upheld by the 9th Circuit Court in a challenge to EPA's Phase II Municipal Stormwater Regulations (Environmental Defense Center v. EPA, ERC 1833, 319 F.3d 398 (2003)). To be in compliance with this permit, all discharges into and from the MS4 must comply with the requirements in sections S4, S5, S6 and S7 of the permit. Those sections recognize the limited practicability of controlling some types of discharges into the MS4.
- Discharges to ground are covered because the permit must satisfy both federal and state law. Under state law (the Water Pollution Control Act, Chapter 90.48 RCW), Ecology is required to address discharges to "waters of the state" which include underground waters. The Underground Injection Control (UIC) program regulates many, but not all, stormwater discharges to ground water. By implementing the SWMP required in these permits, permittees will meet most of the requirements of the UIC rule (Chapter 173-218 WAC); the exception is the assessment and retrofit requirements for UIC wells receiving stormwater.
- Ecology agrees that discharges from emergency firefighting activities should be unconditionally allowed. Discharges from an individual site may or may not cause or contribute to a WQS violation, but it is impracticable to require that to be considered in the course of preserving life and property. Ecology acknowledges firefighters' training and experience in handling hazardous material and defers to their best judgment in emergency situations.
- Ecology does not agree that discharges from planned, non-emergency activities such as training exercises and equipment maintenance, should be unconditionally allowed in the MS4. Appropriate BMPs should be applied to avoid planned discharges of pollutants to the MS4. The RTC on the S5 section on Illicit Discharge Detection and Elimination, Ecology specifically addressed planned discharges.
- SEPA and other regulatory processes are appropriate for new outfalls. Such new discharges must comply with applicable regulations in order to be in compliance with this permit.
- Ecology agrees that this permit cannot authorize discharges to tribal waters. The exclusion of these discharges from this permit does not waive any rights the State may have with respect to the regulation of the discharges.

RTC # 1.21 Non-Stormwater Discharges

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Note: See also RTC #20 Authorized Discharges.

Commenter(s): C7, C8, C10, E4, E5, E10, E12, E13, E14, P1, P3, P4, P5, P6, P7, P12, P13, P14, P16, P17, W3, W4, W6, W19, W22, W30, W40, W51

Permit section: S5.C.8.b.ii (Phase I) , S5.C.3.b (WW Phase II) , S5.B.3.b (EW Phase II), and S6.C.3.b

Range of comments on the issue:

- Restore full list of items that do not have be addressed unless identified as a significant source of pollution.
- All water line and hydrant flushing is consistent with EPA model ordinance.
- Fire hydrant and water main flushing should not be required to control flow.
- Potable water up to 1 ppm should be allowed without requiring dechlorination.
- Will waterline flush water upset a wastewater treatment plant.
- Adjusting pH "as necessary" and reoxygenation is an imposition of numeric limits.
- Hyperchlorinated line flushing should be controlled using AWWA specification.
- Definition of Hyperchlorination should be added.
- Controls for swimming pools needs to be writing in language understandable by homeowners.
- Do potable water and swimming pool discharges to ground need pretreatment?
- Reducing landscape runoff is not achievable or necessary.
- Landscape runoff should be "controlled" as "reduced" implies constant reduction until zero flow is achieved
- Lawn watering should not be prohibited by ordinance.
- Water for street washing and dust control should be allowed without a requirement to minimize water used.
- It will be hard to regulate discharges resulting from wasteful irrigation and wash water practices.
- Some items on the list, that does not have to be addressed, require a Construction Stormwater General Permit.
- Excavation dewatering is allowed under the Construction Stormwater General Permit but is not on the list allowed by this permit.
- Some Construction Stormwater General Permit requirements are repeated in this permit.
- Prohibition of non stormwater discharged should not apply to residences.
- Permittees should have more flexibility in determining if discharges will impact receiving water.
- Unregulated car washing should not be allowed.
- Residential outdoor car wash water cause toxic pollution.

- Single family car or boat washing should be allowed with education to control impacts.
- Agricultural runoff should not be regulated under this permit.
- Where BMPs can be applied to prevent an illicit discharge they should be allowed.
- The responsibility for determination of "significant sources of pollution" is not clear.

Response to comments:

- All non stormwater discharges are to be effectively prohibited. The list of non stormwater discharges under S5.C.8.b.ii in the Phase I permit, S5.C.3.b in the Western Washington Phase II permit, and S5.C.3.b in the Eastern Washington Phase II permit and S6.C.3.b in all permits qualifies which non stormwater discharges are not significant and do not have to be addressed by the program. The first group are non-stormwater discharges that Ecology does not believe needs further qualification to ensure they will remain insignificant. The second list is those discharges that will not be significant provide they meet specified criteria.
- The items that do not have to be prohibited as part of the Stormwater Management Plan prohibition on non stormwater discharges does not affect how they may be addressed by other permits managed by Ecology or other entities.
- Ecology determined that several items on the list suggested by EPA have a high potential to be significant sources of pollution.
- The risk that a source could be a significant source of pollution could often be controlled with reasonable control efforts. Those items are prohibited if the controls are not in place.
- Permits issued by Ecology must contain all known, available and reasonable methods of treatment. The controls to ensure discharges remain at a low risk for becoming significant are known, available and reasonable so have been required in the permit.
- Often the control that is required is a minimization of runoff. This does not imply that the practice must have zero runoff as many comments implied. It implies that no more water than is necessary to achieve the task should allowed to runoff. The requirement to reduce landscape runoff has been changed to also require minimization of runoff.
- American Water Works Association (AWWA) specifications are provided in ANSI/AWWA C651-05. Section 4.5.2 addresses discharge of heavily chlorinated water. It requires neutralizing the chlorine when environmental damage is a possibility. It also refers dischargers to federal, state and local regulatory agencies for special provisions. This permit provides the state regulatory agencies' special provisions.
- American Water Works Association Research Foundation has produced a research report titled "**Guidance Manual for Disposal of Chlorinated Water [Project #2513]"** This paper describes several means of neutralizing the chlorine in water prior to discharge. The paper evaluate the cost of materials, complexity of correctly dosing, and the risks of causing pH and depressed oxygen from properly and or overdosing with the chemicals. There are methods for de-

chlorinating water that when properly dosed (e.g. buffered Ascorbic Acid) will not require re-oxygenation or pH adjustment. However the MS4s may allow more flexibility, to the dischargers who discharge into their system, to chose other methods and restore oxygen and/or pH levels, as necessary.

  - The research report is out of print. Copies may be obtained by contacting AWWA customer service at 1-800-926-7737 and asking for a photo copy of "Guidance Manual for Disposal of Chlorinated Water" Order number 90863. There will be a nominal fee.

- The allowable chlorine concentration is a technology based requirement. This is the level that can be tested fairly easily in the field.
- The risk of depressed oxygen from hyperchlorinated water is higher than for potable water due to the higher levels of de-chlorinating chemicals required.
- Some comments indicated that flow control to prevent resuspension of sediment creates a conflict with the purpose of the discharge. In those cases the program should be designed so that sediment is removed from the collection system prior to the discharge so that it will not be re-suspended. Language has been added to make clear it is re-suspension within the MS4 that must be controlled
- Operators at wastewater plants should be consulted prior to any planned discharge of large flows into the sanitary sewer. There may be specific timing issues that will influence plans.
- EPA has identified runoff from lawns as one of the largest contributors of residential pollution. Allowing excessive landscaping runoff to enter a stormdrain would be a failure to apply AKART.
- Residential car washing was not added to either of the lists. Residential car wash water has been observed to cause foaming in ditches. It interferes with oil and grease removal efficiency in catch basins and it can be avoided by directing runoff to landscaped areas where it can infiltrate, or the use of commercial carwashes that recycle or treat wash water.
- The discharge of water from excavation de-watering is allowed if the construction is covered by a Construction Stormwater General Permit, as discharges authorized under NPDES permits are explicitly allowed under condition S2 Authorized Discharges. Construction sites not covered by the Construction Stormwater General Permit may discharge de-watering water if the practice is a addressed in a stormwater pollution prevention plan reviewed by the local jurisdiction.
- Local jurisdictions are encouraged to make regulations applicable to residents understandable by residents.
- Agricultural runoff should be allowed in the MS4 subject to minimizing the minimizing the amount of irrigation runoff. The allowance for landscape irrigation is expanded to include all irrigation runoff.
- This requirement sets a minimum of what is expected. Any tools that municipalities can use that result in illicit discharge elimination are allowable.
- Local jurisdictions may determine a source is significant and address it at any time. If Ecology determines a source is significant the municipality will be informed through an Administrative Order establishing a timeline by which the source must be addressed.

S3 RESPONSIBILITIES OF PERMITTEES

No comments received on this section

S4 COMPLIANCE WITH STANDARDS

RTC # 1.22 S4 Compliance with Standards

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Summary of issues: How does this permit require permittees to comply with Water Quality Standards (WQS)? What happens when a WQS violation occurs? Is compliance limited to implementing BMPs in S5/S6 and S7? Does a WQS violation constitute a permit violation? Are the appropriate regulations being implemented?

Commenter(s): C1, C3, C4, C5, C6, C7, E3, E4, E5, E6, E10, E11, E12, E21, P1, P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P13, P14, W2, W3, W5, W6, W7, W13, W14, W17, W18, W22, W23, W24, W28, W30, W39, W40, W42, W45, W47, W50, W51

Range of comments:

General comments on this section

- Ecology's general permits for industries, construction sites, and municipal stormwater should be integrated and complementary
- Provide a clear linkage between S2, S4, and S5
- Every requirement placed on a permittee must be based on actions or conditions that are within the existing legal authority of the permittee and for which the permittee can reasonably be held accountable
- This permit does not comply with numerous state and federal regulations
- This language is less protective than what was in the preliminary draft
- This permit will lead to only marginal improvements in management of discharges from existing lands from which stormwater is discharged without treatment; retrofits are needed

S4.A *Comments*

- Delete this section and all references to RCW 90.48.520; it is inappropriate to subject stormwater to a state law provision intended to apply to wastewater treatment programs
  - RCW 90.48.520 does not support the definition of stormwater as wastewater; it is aimed at POTWs and other wastewater dischargers, not MS4s and other stormwater dischargers
  - Federal regulatory definition of MS4 specifically excludes treatment works that handle wastewater
  - CWA and WPCA distinguish between wastewater and stormwater; although both are regulated, they are intended to be regulated differently; the permitting regimes are not interchangeable; structural differences in the systems including the number of outfalls and access for monitoring, and ease of control of the discharges, the support the regulatory distinction
  - Ecology should seek a change in law if the intent of the permit is to limit the discharge of specific chemicals to or from MS4s

- If Ecology intended to create a WQ compliance provision, it has not followed law and regulations, including but not limited to omitting site-specific discharge considerations and possible dilution
- Don't hold stormwater to WQS; WQ regulations confirm that BMPs are to be used to control pollutants in stormwater
- Current permit does not convey to permittees how to comply, or at what point, or with what actions; this is inconsistent with goal of permit to place defined and appropriate controls on municipal stormwater and makes permittees accountable for applying these controls
- As written, means that WQS violation is a permit violation even though permittee is in compliance with all other permit conditions
- Remainder of permit does little to enforce this provision/how is this requirement meaningfully enforced by this permit?
- Address in final permit how permittees will demonstrate compliance with this section
- Retain reference to RCW 90.48.520; support its addition to permit

S4.B *Comments*

- Delete this section
- WQ goals of this permit are unattainable
- Permittees cannot meet WQS
- Don't hold stormwater to Water Quality Standards (WQS)
- Not enforceable; illegally vague, overbroad, uncertain, and provides inadequate notice
- As written, means that WQS violation is a permit violation even though permittee is in compliance with all other permit conditions
- Remainder of permit does little to enforce this provision/how is this requirement meaningfully enforced by this permit?
- Current permit does not convey to permittees how to comply, or at what point, or with what actions; address in final permit how permittees will demonstrate compliance with this section
- Condition is inconsistent with goal of permit that places defined and appropriate controls on municipal stormwater and makes permittees accountable for applying these controls
- This approach would not authorize the ill-defined category of discharges in S2
- MEP replaces the water quality standard requirements of 1311 and demonstrates that congress did not require MS4s to comply strictly with 1311(b)(1)(c)
- Change "does not authorize" to "prohibits"
- The requirement to comply with WQS is a basic requirement of all NPDES permits
- Require strict compliance with 301(b)(1)(c); Ecology has discretion but since stormwater is the leading contributor to WQS violations in urban waters, it makes sense to require compliance
- Reinstate language from the preliminary draft stating that the permit will protect water quality and comply with all applicable surface water, ground water, and sediment management standards

- Equity issues in how CWA and compliance with WQS are addressed in these and Ecology's other general SW permits
- What happens when WQS violation occurs?
- Reinstate language from preliminary draft stating that if site-specific conditions warrant additional controls to protect beneficial uses, additional controls shall be implemented
- Stormwater constitutes more than a minor detrimental effect
- Permit must require action(s) to address WQS violations
- A clearly defined set of actions, review, and approval processes to address the problem, involving both Ecology and the permittee must be included in the permit in the case that site-specific information demonstrates that a WQ problem is occurring due to a permittee's stormwater
- If a receiving water is not meeting WQS then a TMDL must be done to determine if the violation is related to stormwater
- Consider California permit approach to addressing WQS violations (the same language is in many CA permits, for example review the language the final LA County permit at www.swrcb.ca.gov/rwqcb4/html/programs/stormwater/la_ms4_final/FinalPermit.pdf, in particular subparts 3 and 4 of "Part 2 RECEIVING WATER LIMITATIONS" beginning on p. 17 of the permit)
- Suggested language to address WQS violations (similar to CA permit approach):
  New section in S4:
  "*If a water quality problem is discovered, the permittee shall meet its permit obligations fully by doing the following: the actions listed below will be taken when the permittee and Ecology determine, based on well-documented site-specific information, that a significant water quality problem in the receiving water caused by an MS3 owned or operated by the permittee can be improved by implementing additional programmatic measures beyond those required in Special Conditions S5 and S7.*
  1. The permittee shall submit a report to Ecology within 60 days after a determination by the permittee and Ecology. The report shall include:
  a. A summary of technology-based BMPs and programmatic activities currently being implemented that are affecting the discharge from the permittee's MS3.
  b. A proposed implementation schedule for additional programmatic activities that will be implemented.
  2. Ecology shall review the report and, in writing within 30 days after receipt, shall approve additional programmatic activities and the permittee's implementation schedule or require the permittee to modify its report.
  3. The permittee shall submit a modified report within 30 days after receiving notification to modify.
  4. Within 30 days after receiving approval from Ecology of the report described in (1) above, the permittee shall revise its SWMP and implement additional programmatic activities in accordance with the approved schedule.
  5. So long as the permittee has complied with the procedures set forth above and is implementing the revised SWMP according to the approved information

schedule, the permittee does not have to repeat these procedures for the same water quality problem unless directed otherwise by Ecology."

- G6 requires permittees to take action to avoid WQS violations
- Use benchmark monitoring and adaptive management to ensure compliance with WQS
- Benchmarks above WQS do not provide adequate protection
- Include site specific monitoring and benchmarks for the listed pollutants from all municipal stormwater discharges to listed impaired water bodies and use that data to determine the effectiveness of BMPs and other controls to control the specific pollutants of concern
- Industrial and construction permits require new discharges to meet specific permit limits where discharging to a 303(d) listed water; why aren't municipal dischargers required to meet similar limits?
- Implement EPA's WQS for priority toxics except where they do not provide adequate protection for listed species; specifically, set effluent limit for copper at 1 ppb
- Add numeric effluent limits for copper
- Systematically identify, prioritize, and update inadequate stormwater facilities (could prioritize based on receiving water); require minimum standards for the number of facilities upgraded, percentage of projects undertaken, or pollutant load reduced during the permit cycle
- Inequity of requiring individual landowners to retrofit but not municipalities
- Permit must contain provisions to specifically address new discharges
- Consistent with Ecology's long-held policy to include more stringent requirements for new discharges, the preliminary draft addressed new and existing discharges differently; now all discharges are required only to "make progress" towards compliance with WQS; appreciate MS4s' challenges, but consider inequities where industrial and construction permits require new discharges to meet specific permit limits
- Permit should address existing discharges, not just new development and redevelopment, with structural treatment requirements: retrofit must be required to address existing problems

S4.C *Comments*

- S4.A and S4.B do not represent MEP and go beyond CWA's MS4 permit requirements
- Clearly state that compliance with the permit fulfills the CWA requirement to reduce pollutants to the MEP
- Add to end of section, "*by following the terms of this permit*."
- MEP should only apply to new development/clarify that MEP dose not mean retrofitting the existing MS4
- Tighten this standard to prohibit WQS violations

S4.D *Comments*

- Clearly state that compliance with permit fulfills state requirement to apply AKART
- Add to end of section, "*by following the terms of this permit*."

- Clarify that the standards in Ecology's current stormwater manual represent AKART as defined by RCW 90.48

S4.E *Comments*

- Despite S4.A and S4.B, this permit will not effectively prohibit discharges that cause or contribute to WQS violations; this section means WQS violations are allowed
- Permit does not establish a compliance schedule for meeting WQS; instead assumes that BMPs will be adequate to demonstrate progress
- How will this permit "make reasonable progress" without including retrofit requirement?
- Consider a benchmark monitoring approach to ensure progress towards compliance
- Stormwater is a substantial contributor to 303(d) listed and other salmon-bearing waters
- Permit does not address current condition of receiving waters
- Permit does not consider use designations
- Permit does not consider presence of threatened or endangered species
- Permit does not address high quality waters
- Permit fails to address anti-degradation requirements of the CWA
- How will the permit eventually ensure that listed water bodies are not further degraded by municipal stormwater discharges?
- Permit must demonstrate that existing discharges into an impaired water are subject to compliance schedules to meet WQS
- Permit must demonstrate that sufficient pollutant load allocation exists to allow new discharges to impaired waters
- Permit must contain provisions to specifically address new discharges to impaired waters, whether or not a TMDL has been completed
- Other point sources are bearing more of the burden of achieving WQS in impaired waters
- Industrial and construction permits require new discharges to meet specific permit limits where discharging to a 303(d) listed water, why not new municipal discharges?
- Permit should include site specific monitoring and benchmarks for the listed pollutants from all municipal stormwater discharges to listed impaired water bodies and use that data to determine the effectiveness of BMPs and other controls to control the specific pollutants of concern
- Are there circumstances under which the general permit will not adequately protect a receiving water and therefore either an individual permit should be issued or the permit modified based on watershed conditions?
- Concerns about specific water bodies were identified by commenters
- WQ goals of this permit are unattainable
- Permittees cannot meet WQS
- General assumption that BMPs will not be effective in meeting WQS
- Delete "make progress toward compliance with" and replace with "*to sufficiently address the long-term goal of meeting*"

- Add to end of section ", *including section S4.X* [new section addressing violations of WQS, see S4.g below]."
- Add to end of section: "*Compliance with the terms of this permit shall fully satisfy this requirement and constitutes compliance with all existing statutory and regulatory requirements for municipal stormwater discharges.*"
- Delete entire section and replace with "*Full implementation of applicable SWMP elements described in S5/S6, applicable TMDL requirements described in S7, and applicable monitoring requirements described in S8 satisfies the requirements of S4.C and S4.D.*"
- State here that compliance with permit fulfills MEP and AKART
- Revise to clarify that AKART and MEP are defined by S5 and S6, S7, and S8
- Section makes it ambiguous whether all sections of the permit are viewed by Ecology as "requirements"
- Delete reference to groundwater

S4.F *Comments*

- Section should authorize Ecology to take these actions if WQS are not being met
- Delete S4.F.3 consistent with deletion of other references to RCW 90.48.520
- Delete this entire section and replace it with appropriate procedures for permittees and Ecology to implement to address WQS violations; if new permit language and procedures are appropriate, it should not be necessary to modify the permit to implement the terms
- G14 provides ample terms for reopening

Response to comments:

- When Ecology writes and issues permits, the permit must satisfy both federal and state law. Ecology has reviewed the federal and state laws and regulations that are applicable to this permit and we believe the final permit is in compliance with all of those requirements.
- It is Ecology's non-discretionary obligation to apply RCW 90.48 to this permit. Ecology believes that RCW 90.48.520 is applicable to municipal stormwater discharges for several reasons. The statute prohibits the authorization of any discharge of toxicants that would violate WQS, sediment criteria, or dilution zone criteria. This prohibition is not limited to discharge of wastewater. Even if this prohibition were limited to the discharge of "wastewater," stormwater discharges are wastewater because stormwater discharges include pollutants and toxicants that are discharged without being used.
- This permit requires compliance with ambient water quality standards, stormwater discharges are not required to meet specific pollutant concentration limits, but they must not cause or contribute to WQS violations in the receiving water. All sections of the permit are required, but in general S5 and S6 are designed to make progress toward compliance with standards, recognizing limitations in current technology and permittees' abilities to control discharges into their MS4s. Ecology agrees that changes to the permit are needed to clarify the permittees' pathway to compliance with S4.A and S4.B. In the event that a WQS violation is identified by either Ecology or the permittee, Ecology will direct the permittee to address the violation pursuant to the defined process contained in the revised permit language, new section S4.F. The final permit requires a permittee to notify

Ecology if they become aware that a discharge from the MS4 is causing or contributing to a violation of WQS in a receiving water.

- Ecology's approach to implementing permit requirements S4.A, S4.B, S4.C and S4.D is primarily for permittees to demonstrate compliance with S5 or S6, as applicable to the permittee, and S7. If Ecology determines that a WQS violation is occurring due to discharges from an MS4, the permittee will also need to demonstrate compliance with new section S4.F.
- Conditions S4.A, S4.B, and S4.F are based on state law and Ecology has not determined that compliance with these conditions are necessary to control the discharge of pollutants to the maximum extent practical (MEP). Compliance with S4.A, S4.B, and in particular the response required under S4.F will require actions on the part of the permittee which Ecology believes may go beyond the federal MEP permitting requirement. Permittees which are in violation of water quality standards pursuant to S4.A and/or S4.B but are in compliance with the procedures outlined in S4.F for those violations are in compliance with the requirements of the permit for S4.A and S4.B.
- Ecology will exercise discretion in enforcing WQS violations as permit violations. If a Permittee is implementing the required response to WQS violations in new section S4.F, Ecology will not consider the WQS violation to be a permit violation. Ecology does not consider S4.F to be a compliance schedule, but to be the defined response to circumstances where state water quality standards are exceeded. Ecology believes the requirements of S4.A and S4.B coupled with the required response under S4.F complies with the federal requirement under §1342(p)(4)(B) that "Any such permit shall provide for compliance as expeditiously as practicable, but in no event later than three years after the date of issuance of such permit."
- The Toxics Cleanup Program at Ecology is addressing the question of how to address sediment contamination, particularly where CERCLA applies. In general, the defined response to WQS violations included in the final permit is intended to address these situations within the limit of the authority of this permitting program.
- Retrofits are an option for responding to WQS violations, but not automatically required, as other BMPs may effectively address the problem.
- The SEPA process and other applicable regulations (see final permit section S2.D) combined with the SWMP required in S5/S6 should address concerns regarding new outfalls to impaired waters.

S6 STORMWATER MANAGEMENT PROGRAM FOR SECONDARY PERMITTEES

RTC # 1.23 S6 Secondary Permittees

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): C3, E3, E7, E10, E12, E15, W9, W13, W17, W23, W30, W40

Comments:

S6.B Legal Authority

- The permit should not define the secondary permittees' legal authority.

S6.C Implementation Schedule

- Secondary permittee implementation schedule: recommend changing the implementation dates in S6 to match those in S5 for the same activities. The schedules are different and, for some items in S6, more aggressive. Secondary permittees may need more time.
- The difference in S5/S6 implementation schedules may create problems for permittees trying to work together to plan and implement cooperative programs or for permittees deferring to another entity to implement a program component. Changing the deadlines of the secondary permittee to match those of the city/county would better facilitate cooperative efforts and programs and avoid potential conflicts. Because negotiation is involved in this type of agreement the longer of the two dates should be utilized.
- The S6 timelines for implementation of the SWMP are too long, for example S6.C.3 provides 4.5 years to complete a map of the stormwater system.

S6.C.2 Public Involvement

- Include policy that permittee must consider public comments
- Ecology needs to follow up on public notices

S6.C.3 IDDE

Note, see also RTC #20 S2 Authorized Discharges and RTC #21 Non-Stormwater Discharges

- The secondary permittees can reduce or minimize illicit discharges from their own operations but have little control over other sources.
- Reporting spills to Ecology is not local agency role.
- Specific language suggestions:
    - S6.C.3, change illicit discharge to illicit connection.
    - S6.C.3.b, delete word "spilling"
    - Delete S6.C.3.b.iv
    - S6.C.3.d, delete "Keep records of inspection and follow up activities" since it is an unfunded activity.
    - S6.C.3.b.f, change "preventing" spills to "reducing" spills.
- This section appears to be shifting Ecology's responsibility in administering the industrial general permit program to the municipalities. Control of discharges from industrial areas since industries are already permitted by Ecology, also discharges from other jurisdictions, or other agencies, or even private properties.

S6.C.4 Construction Site Stormwater Runoff Control

- Make sure to only require implementation of the mandatory part of the minimum technical requirements since the manual is guidance, not a regulatory requirement.

S6.C.5 Post-Construction Site Stormwater Management for New Development and Redevelopment

- Make sure to only require implementation of the mandatory part of the minimum technical requirements since the manual is guidance, not a regulatory requirement.

S6.C.6 Good Housekeeping

- Specify BMPs owned and operated by the secondary permittees.
- Disagree that sand needs to be stored in a permanent walled and roofed structure.
- Specific language suggestions:
    - S6.C.6.a, delete "response to spills"

- S6.C.6.a.i, delete "and proper disposal of waste removed from system"
- S6.C.6.a.ii, "sand and salt" should be "sand and salt *mixed with deicer additives*"
- S6.C.6.a.v, remove "vegetation disposal; and trash management." Trash and vegetation management are regulated by solid waste management and must not be included in this permit

Response to the range of comments:

Note: See also RTC #61 Required Use of Ecology's Stormwater Manuals

S6.B Legal Authority

- The permit does not define legal authority; rather, the section provides examples.

S6.C Implementation Schedule

- Because the implementation dates for secondary permittees are based on the date of permit coverage, not the effective date of the permit, it is not possible to align the schedules for the cities and counties with the secondary permittees. However, Ecology agrees that implementation dates for secondary permittees should be flexible enough to allow for and facilitate coordination with cities and counties.

S6.C.2 Public Involvement

- Ecology agrees that the permit language is not adequate to require that each secondary permittee appropriately consider public input in finalizing its SWMP.

S6.C.3 IDDE

Note: See also RTC #20 S2 Authorized Discharges and RTC #21 Non-Stormwater Discharges

- It is the secondary permittees' responsibility to perform IDDE activities within their area of control. Secondary Permittees must control discharges to and from their MS4, and activities in S6.C3.iii are controllable by secondary permittees.
- The local agency does have a role in overseeing spill response activities. Permittees need to coordinate with Ecology spill response activities.
- The suggested language changes were considered and deemed unnecessary or contrary to the intent of the section.
  - Illicit discharge includes illicit connections too but the reverse is not true. The intent here is to include both illicit discharges and illicit connections.
- Ecology controls industrial stormwater through its general permit program and is not shifting its responsibilities onto the secondary permittees. Secondary permittees are responsible for controlling discharges into their MS4 despite of presence of other permits and can, both through their administrative process and due to their proximity to the sites, can provide effective added oversight for better protection of receiving waters.
- The timeline provided in the permit is adequate and reasonable. This timeline was developed considering the range secondary permittees' capabilities and the range of activities that may be conducted. Any more stringent timeline may impose undue burden and may lower quality of the program implementation. Ecology prefers to ensure comprehensive program development and implementation.

S6.C.4 and S6.C.5: See RTC #61 Required Use of Ecology's Stormwater Manual

S6.C.6 Good Housekeeping

- The first sentence of S6.C.6 specifies that the O&M plan is for activities conducted by the secondary permittee. This applies to the entire section S6.C.6.

- Ecology agrees that secondary permittees should have more flexibility with regard to appropriate covered storage for sand and salt.
- The suggested language changes were considered and deemed unnecessary or contrary to the intent of the section.
    - Failure to appropriately manage vegetation and trash disposal will contribute pollutants to the MS4.

S7 TOTAL MAXIMUM LOAD ALLOCATIONS

RTC # 1.24 S7 TMDL Requirements

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E3, P2, P6, W26, W42

Comments:

Reassess stormwater impacts for historic TMDLs

- Historic TMDLs did not consider stormwater a point source. Ecology needs to reassess stormwater impacts on 303(d) listed water bodies.
- TMDL requirements should not be included in the permit if a wasteload allocation was not established for municipal stormwater discharges.
- TMDLs where a stormwater wasteload allocation was not established should be reevaluated.

Compliance with wasteloads

- Permit fails to require compliance with waste loads established in TMDLs.
- Permit fails to include Ferndale stormwater requirements from TMDL

Incorporation of TMDL wasteload allocations established after the permit is issued

- Only include TMDLs established prior to application date or effective date of permit in the list of applicable TMDLs.
- There is conflict in the dates listed as the critical date for applicable TMDLs.
- Permits should be modified when TMDL wasteload allocations are approved.
- TMDL wasteload allocations established after permit effective date should be incorporated at next permit issuance.
- Language on what conditions would lead to permit modification should be included in the permit.

Clarification

- First and last sentence of S7.C are redundant.

Response to the range of comments:

Reassess stormwater impacts for historic TMDLs

- The priority of the TMDL program is to establish new TMDLs. Existing TMDLs may be modified through adaptive management of the TMDL but this permit will not modify TMDLs.
- Ecology establishes TMDLs based on the best information available at the time the TMDLs are established. Often, the necessary pollution reductions are so large that it is not feasible to reserve part of the loading capacity for later allocation as a wasteload allocation to future permittees. In the case of new municipal stormwater permits, some of the nonpoint sources incorporated into the load

allocation of the TMDL are converted to point sources without any change in sources or loading.

- Established TMDLs have been examined to find any expectations of actions by municipal stormwater operators in the TMDL implementation plans. If there were none, it is expected that complying with the permit will achieve the TMDL goals. Any expected actions that were identified and that called for actions beyond those already required by the permit are summarized in Appendix 2.

Compliance with wasteloads

- Pursuant to EPA's guidance on "Establishing Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs" (see http://www.epa.gov/npdes/pubs/final-wwtmdl.pdf), the WLAs established in the TMDL are expressed as Best Management Practices (BMPs) instead of numeric limits.
- Where actions are identified as required for a permittee in the TMDL but are not otherwise required in the permit, those actions are required by inclusion in Appendix 2. The compliance with the wasteload allocations established in TMDLs is through the implementation of the BMPs in the permit, including those in Appendix 2.

Incorporation of TMDL wasteload allocations established after the permit is issued

- Ecology reserves the right to modify a permit when the environmental benefits of a permit modification justify the resources necessary. All TMDLs approved prior to coverage under the permit are applicable. For permittees that apply prior to permit issuance, the critical date is the permit effective date. For permittees that apply after permit issuance, the critical date is the date that coverage is granted. The permit has been changed to reflect the date coverage is granted. Any changes in Appendix 2 would constitute a change in permit conditions, therefore this action would require a permit modification. Typically TMDLs requirements are incorporated into existing permits when they are reissued.

Clarification

- The sentences are redundant. Condition S7.C was revised.

S8 MONITORING

RTC # 1.25 Purpose of Stormwater Monitoring Requirements

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Summary of issue: What is the purpose of the stormwater monitoring requirements in the Phase I permit and the purpose of selecting sites in preparation for long-term stormwater monitoring in the Phase II permits? Is the objective achievable? Other objectives should be considered. Existing monitoring programs should be considered.

Commenter(s): C1, C3, C4, C5, C6, E10, P3, P4, P5, P6, P7, P9, P13, P14, P16, W53

Permit section(s): S8.A.e in the Phase I permit; S8.C.1.a in the Phase II permits

Range of comments on the issue:

What is the purpose of the monitoring?

- What question is this Phase II monitoring component intended to answer? What is Ecology hoping to document? Is it pollutant loading? Proportion of impervious area? Please clarify. (W53, E10)
- Fail to see where this permit builds on the monitoring objectives of the current Phase I permits. (P16)

Concerns with the proposed purpose.

- Using stormwater pollutant loading analysis can support stormwater management decision making, provided that sufficient data can be obtained so that the decisions are based on sound science and robust statistical analysis; however, such detailed analysis and great expense may not be the best way to support decision making.
    - Do we need the data before we can make a decision? Reasonable actions can usually be taken in advance of such data collection and analysis
    - What are we trading in exchange for the additional data? The costs involved in collecting these data will draw funds away from other stormwater management and data collection efforts.
- The EMCs and pollutant loadings need to be qualified in terms of what they mean for a particular site, relative to what, and how we would know whether they are good or bad. S8.A.3 needs this context.
- Include site-specific monitoring and benchmarks for the listed pollutants from all municipal discharges to listed, impaired waters. Use that data to determine BMP effectiveness and other controls. (C3)
- The permit doesn't have effluent limits. If monitoring results violate acceptable standards, action must be taken immediately. Rapid self-reporting of violations is necessary, followed by development of a compliance schedule and follow-up inspection. Otherwise, the permit should be suspended. (C6)
- The permit should have monitoring that provides useful information for developing effluent limits or performance standards in the next permit. (P13, P14)
- Suggested rewrite of S8.A.3, delete the QAPP requirement and add the following sentence: "This data is generated solely for the purposes of long term trend analysis to be used as a measure of the comprehensiveness of the Permittee's SWMP in conjunction with other qualitative measures such as inspections, illicit connection removals, complaint/spill response, public education, redevelopment, maintenance, and other municipal programs." The QAPP requirement is repetitive in this section. The long-term monitoring program alone may or may not show the true effectiveness of the SWMP. In addition to the qualitative measures included in these suggested edits, there are many factors that can affect trends that the Permittee cannot control, e.g. increased traffic, atmospheric deposition, and upstream conditions. For the most part, there is not a clear cause and effect relationship between cumulative municipal stormwater discharges and receiving waters.
- Trends monitoring should not be a permit requirement since stormwater is just one of many factors affecting water quality. As noted in the fact sheet, many of these factors are outside of the permittees' control.

- Even if a trend can be determined by this program, it is unclear the degree to which the trend would actually influence decision making at the programmatic and regulatory scale. The root cause of a pollutant loading trend may simply be a change in flow as due to drought. A statewide trend might mask more important trends occurring on the site scale. The question is not "what is the trend?" but "why is the trend for this site so different from another, seemingly similar site?"
- There is a high risk that that the EMC-based stormwater monitoring requirements in S8.A will result in a high cost over a long period of time and yet result in little if any benefit to Ecology, the permittees, or the environment. Mitigate these risks by lowering the mandatory level of effort.
- S8.A should be removed from the Phase I permit since it is unlikely to meet the primary objective to provide a feedback loop for the adaptive management of the permit and the permittee's SWMP.
- Seattle supports in principle the management program effectiveness monitoring and the BMP evaluation monitoring. Both are likely to provide a feedback loop for adaptive management. However, we believe the stormwater monitoring is highly unlikely to provide results that support adaptive management, and recommend it be deleted. (P6)
- Flexibility needs to be written into the permit so that if an emerging chemical shows up as a problem, then those chemicals would become part of the regular monitoring suite. (C5)
- Monitoring program is not acceptable. Data is available in national databases. Propose alternative program developed specifically for Pierce County. (P4)
- Permit should acknowledge existing ongoing monitoring programs. The permit could allow continuation of permittee's current monitoring programs with the understanding that each permittee will have different monitoring needs and will tailor program to meet them. (P5)
- Permittees collect data to conduct stormwater basin planning and for special projects beyond the scope of IDDE. Is this considered meeting a permit requirement? (P5)
- The proposed stormwater monitoring and BMP monitoring will divert funding away from the successful Thea Foss program, and expand to other parts of the City. (P7)
- Limited scope of the monitoring required does not appear to support Puget Sound Partnership goals of protecting and restoring Puget Sound by 2020. (P9)
- Suggest that Ecology allow flexibility in monitoring based on information already collected by the permittee. Changes could be conveyed in QAPPs and approved by Ecology. (P9)
- If Ecology intends for pollutant loading trends to be indicative of SWMP effectiveness, then the stormwater monitoring component should not be separate from the SWMP effectiveness evaluation monitoring component.

Is the objective achievable?

- The intent of pollutant load analysis is to characterize runoff so that a trend can be observed and management decisions made regarding the SWMP or permit requirements. Due to the high variability of pollutant concentrations in and flows

of stormwater runoff (for which measurement inaccuracies are combined and multiplied in estimating loads), it would take hundreds of event-mean concentration (EMC) samples over many years to even begin to meaningfully establish a baseline measure, which is only the first step in trend analysis. To evaluate trends using highly variable data, use the median rather than the mean which is highly influenced by extreme values at both high and low ends. Hundreds or thousands of samples are needed to achieve a 95% confidence level, depending on the parameter and the magnitude of the trend Ecology is interested in. It could take about 35 years to see a trend. Combining multiple sites with a given land use will require normalization for factors such as basin size, EIA, and BMPs in use. There is a high risk that these data will be misinterpreted, resulting in erroneous management decisions.

- We should fully expect that no significant trends will be discernible within a single 5-year permit cycle. Another plausible outcome is a deteriorating trend in water quality due to growing urbanization and industrialization, in spite of municipal control efforts. Neither outcome should be interpreted by Ecology as a failure of SWMPs to improve water quality.
- The permit and fact sheet should explain how this program would be able to meet its objective of producing data to describe loading trends.
- Given the great deal of uncertainty about the ability of the stormwater monitoring requirement to meet the stated objective within the permit term, it might be wise to start with a less elaborate system and build upon successes each permit term.
- The monitoring requirements in the Phase I permit are substantially improved over those in the preliminary draft. This characterization monitoring should not be performed for the purposes of long-term trend analysis. The results are not likely to provide information that will answer the question of whether and why stormwater discharges are improving in quality or not.

Other objectives should be considered.

- The stated purpose of stormwater monitoring should be focused on identifying problems and improving conditions in targeted small basins. Monitoring at any one outfall should occur only as long as needed to identify problems and support planning efforts.
- Suggest replace first sentence of S8.A.3 with: "The objective of the stormwater monitoring is to identify subbasin-specific water quality problems and characterize discharges for planning purposes."
- Monitoring needs to be related to what we are actually trying to deal with in the permit.
- Monitoring should be designed to answer the following questions:
  - Is stormwater the source of contamination for each constituent of interest (as opposed to say, aerial deposition)?
  - How do stormwater inputs vary over time?
  - What are the sources of contamination in the watershed? (C5)
- The monitoring section emphasizes water quality parameters and does not provide much detail on water quantity issues. Little or no mention of looking at watershed physical conditions, effects of various flow durations or flow timing on

various salmon life stages and beneficial uses. Not enough specificity on monitoring of flow reduction strategies. (C4)
- Delete "comprehensive long term" from first sentence of S8. (P3)

*Designing monitoring to meet the stated objective***.**
- If programs have already been designed elsewhere to accomplish this objective, the permit and fact sheet should reference them.
- It is critical to include high quality and adequate monitoring for toxic contaminants, to be able to measure pollutant loading. (C5)
- There is a need to allow complex biological monitoring as an alternative to chemical monitoring. (P16)

Proposed restatements of the purpose of monitoring in the draft permit.
- The permit should clearly articulate the objectives and purposes for the different types of monitoring. Proposed purpose statements:

> "Stormwater monitoring is intended to characterize stormwater runoff quantity and quality at a limited number of locations in a manner that allows analysis of changes in conditions over time and generalization across the permittees' jurisdictions. Stormwater program effectiveness monitoring is intended to improve stormwater management efforts by evaluating at least two issues that significantly affect the success of or confidence in stormwater controls. BMP evaluation monitoring is intended to evaluate the effectiveness and operation and maintenance requirements of … BMPs by characterizing effluent characteristics and pollutant removal for at least two treatment BMPs and by characterizing effectiveness of at least one flow reduction strategy."

<u>Response to the range of comments</u>:

What is the purpose of the monitoring?
- Ecology agrees that we need to add a description of the eventual purpose for monitoring sites identified under Phase II.
- See Fact Sheets for Phase I and Phase II permits.

Concerns with the proposed purpose.
- Nearly all concerns are about the stormwater monitoring in S8.A of the Phase I permit, and S8.C.a of both Phase II permits. Some are concerned with how the stormwater monitoring data will be used. Others feel the data will not be useful, or will come at a very high cost with little actual benefit.

  Ecology does not agree with comments suggesting that the stormwater monitoring in S8.A be deleted. The requirement to monitor discharges regulated under this permit is appropriate for this permit. In addition, this monitoring is needed because we have very little information about the overall effectiveness of our municipal stormwater programs in reducing the presence and loading of various types of pollutants that are generated by the urban landscape. One commenter

argues that we intuitively know that various actions required of stormwater programs (source controls, treatment facilities, maintenance of existing facilities, rule enforcement, and public education) should reduce the pollutant loading. But we have very little verification about how much pollutant reduction is possible given implementation of all those actions. And, we have very little feedback about the effectiveness of any particular permittee's stormwater program in achieving pollutant reduction. Only in the case of the Thea Foss Waterway in Tacoma do we have a history of information from which we could make estimates of the effectiveness of a strictly source control program (i.e., no retrofitting of structural controls) in reducing the discharge of certain pollutants. Some data is available in national databases, however, it cannot substitute for data collected from MS4s covered under this permit.

- Ecology also agrees that this data, just like any other data, could be misused or misinterpreted, however, we do not see this as a reason to avoid collecting data. The stormwater monitoring data is intended to be used as a partial measure of the effectiveness of the permittee's SWMP in conjunction with other quantitative and qualitative measures.

  Ecology does not agree that this permit should require monitoring of all discharges to 303(d) listed waters and use this information to determine BMP effectiveness. A blanket requirement to require monitoring of all stormwater discharges to listed waters would be an extreme and unnecessary initial strategy. It is more cost effective to use general information about the likely range of pollutants in stormwater from different land uses, and about the relative success of source control measures and structural treatment measures as input into developing an initial TMDL strategy. Also, since most stormwater discharges currently are not served by a treatment system, we will not get BMP effectiveness information from those discharges. BMP effectiveness information can be gotten from discharges into any waters, not just 303(d) listed waters. Monitoring stormwater discharges to determine the success of a TMDL strategy, may be necessary in some cases, and may eventually provide useful information in regard to BMP effectiveness. We do not want to rely on that as the primary strategy for determining effectiveness of BMP's. (Applies to Phase I and Eastern Washington Phase II permits).

- Ecology does not agree that this permit must include numeric effluent limits and monitoring with requirements for quick corrective action. Federal court decisions have reaffirmed the discretion given to regulatory agencies by the federal Clean Water Act to not use numeric effluent limitations in municipal stormwater permits. Ecology does not consider use of generic numeric effluent limits as being a productive, or even a feasible tool to use at this time. Implementation of such a strategy has many administrative and technical hurdles that make that option difficult and misguided. As encouraged and directed by federal regulations, an effective strategy for achieving the reduction of pollutants to the Maximum Extent Practicable is the implementation of the various aspects of a stormwater management program as required in the permit.

A strategy to intensively monitor all discharges, and to quickly apply corrective actions for any violations of standards is not technically feasible to implement nor fiscally within the realm of possibilities. These municipal stormwater permits cover thousands of stormwater discharges. Most municipalities have many discharge sites. Most of those discharges do not pass through any treatment or flow control facilities because the stormwater drainage system was constructed many years ago before any thought was given to providing such management to stormwater. Retrofitting the stormwater controls that we now use for stormwater treatment and flow control onto these discharges is a multi-billion dollar endeavor. This is not something that is going to happen overnight or even within the next decade. However, we can make progress in reducing the pollutants discharged. The mandated SWMP is intended to do that.

- Ecology does not agree that this permit must require monitoring that makes effluent limits or performance standards possible for the next permit. It does make sense to require new discharges to have proper treatment and flow controls. Because of the passive nature of the available treatment systems, and the highly variable nature of pollutant concentrations and flows, it is impossible at this time to establish effluent limits that would have to be met for every discharge occurrence. However, we can accomplish monitoring that determines a reasonable range of treatment performance for our adopted structural treatment BMP's where required in Phase I jurisdictions and in the next permit cycle for Eastern Washington Phase II jurisdictions. We intend to use that information to improve our management strategies and permit requirements.
- Some argued for more flexibility in the monitoring program, particularly to recognize and accept existing monitoring efforts. Ecology is willing to accept existing monitoring to the extent that it meets the permit requirements. Permittees may incorporate existing monitoring into the QAPPs for this permit. In addition, monitoring programs to meet the permit requirements may include clustering such that more than one section of the monitoring requirements is met through an individual monitoring "project" or through collaboration with other permittees.
- Ecology cannot agree to replace the monitoring requirements in S8 with the alternative program developed specifically for Pierce County. The proposed Pierce County Water Quality Monitoring Plan consists primarily of receiving water monitoring. For reasons explained in the response to comments on coordinated monitoring programs Ecology has chosen not to require receiving water monitoring in this permit. Elements of the proposed monitoring plan may be suitable for meeting the SWMP effectiveness monitoring requirement in S8.B. In addition, Pierce County may want to participate in the effort to develop a collaborative monitoring group, the County's long term status and trends monitoring for streams may be of interest in that forum.

Is the objective achievable?

- If the operative regulatory requirement is to reduce pollutants "to the maximum extent practicable", we need some feedback about how much pollutant reduction we are achieving for the level of efforts that the municipalities are putting forth.

For instance, in most of the areas covered under the municipal stormwater permits, treatment and hydrologic controls do not exist, and the municipalities do not have extensive plans to retrofit structural controls into those areas. We need to find out: how much pollutant reduction is possible through the other types of actions; to see how much pollutant reduction is possible in an area where structural retrofitting of treatment facilities is added to aggressive source control, maintenance, rule enforcement, and public education efforts; and, to see how much those combined efforts would cost so that we can make better informed decisions about what might be the maximum extent practicable pollution controls.

- Concerning the usefulness of the stormwater outfall monitoring requirements, Seattle suggests that a 10% reduction in pollutant concentrations over a 35 year period would be an "admirable achievement." Ecology disagrees. If a 10% reduction across the board in pollutant reduction would be a high bar achievement, then indeed, we are all paying a high price to achieve very little. A 10% reduction in pollutant loading from the existing land development would not likely make a significant difference in the achievement of the nation's and state's goals for our waterways. It is unlikely that it would even offset the increase in pollutant loading that will occur because of new development in that time period. So, what the comment suggests is that we are destined to fight a long-term battle to reduce the rate of increase of pollutant loading to the state's waters. Such a goal cannot be accepted. Ecology is not inclined to permit stormwater programs that achieve so little over 35 years – at least, not without more information that informs us of the impracticality of achieving more.

  Therefore, Ecology suggests that the permittees select outfall monitoring locations in basins where they intend to aggressively pursue structural and non-structural pollutant control measures. In those basins, we are more likely to detect significant pollutant reductions, and we can get a gauge of the jurisdiction-wide cost of trying to expand such an effort. That will truly allow informed decision-making re what price our society is willing to pay to achieve significant pollutant reductions that are more likely to protect and improve our aquatic natural resources. Ecology also suggests that because of the dire state of the aquatic natural resources in our urbanized areas, and the likelihood that our existing land development and pollution control practices are not adequate to turn that trend, that we ought to be willing to make management decisions with less than 95% confidence.

  The combination of less statistical confidence with monitoring in selected basins where we expect significant pollutant reductions because of concerted efforts at structural and non-structural controls should translate into detection of trends at less cost and in a shorter time frame.

Other objectives should be considered.

- When designing the monitoring requirements for these permits Ecology recognized that there are many potential monitoring objectives that could provide useful information for stormwater managers and the public. However, stormwater

related monitoring is expensive, and there are limits to the resources available for implementing these permits. For this permit term Ecology's monitoring objectives focus on monitoring the discharge regulated under the permit, answering management questions, and evaluating the effectiveness of BMPs. At this time these objectives are an appropriate first step. Ecology will determine, through information gathering and in the process of developing the next permit, whether to reconsider the monitoring objectives in future permits.

Designing monitoring to meet the stated objective.

- Other states, notably Oregon and California have conducted extensive stormwater monitoring.
- Ecology agrees that it is critical to include monitoring for toxic contaminants and measure pollutant loading. The monitoring requirements include these elements.
- The required toxicity monitoring is biological monitoring of the stormwater itself. Other types of biological monitoring are done in receiving waters and Ecology is not including receiving water monitoring in the permit at this time. Ecology does not agree that biological monitoring should be allowed as an alternative to chemical monitoring.

Proposed restatements of the purpose of monitoring in the draft permit.

- Ecology generally agrees with the proposed re-statement of the purpose of each section of the monitoring requirements.

RTC # 1.26 Monitoring Site Selection

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Summary of issue: How should permittees select sites in order to meet the objective of the stormwater monitoring requirements in the permits? How many sites are needed? What land uses or SWMP components should be represented?

Commenter(s): C1, C6, E10, E13, E14, P3, P5, P6, P7, P13, P14, P16, W44

Permit sections: S8.A in the Phase I permit; S8.C.1.a in the Phase II permits

Range of comments on the issue:

Number of required sites

- What is the justification for requiring so few sites? The numbers of monitoring sites listed for cities and counties and ports in Phase I are insufficient to provide the scope and detail of information necessary to protect WQS. The scale and scope of information gathered will be severely limited. The numbers are inconsistent with MEP and AKART standards. The goals of this permit cannot be met with so few stations.
- All commercial and industrial sites should be monitored.
- It may be impractical to monitor every outfall, but the program must be designed to elicit useful information. Cities have a plethora of "industrial" areas and

monitoring results from one cannot reasonably be expected to be representative of another.

- It is insufficient for a Phase II city with a population greater than 100,000 to identify only two (or three – typo?) outfalls or conveyances for long-term monitoring, especially if the city has multiple outfalls to 303(d) listed water bodies.
- Phase I permittees should monitor 3 outfalls, but the selection should not be limited by land use types.
- Reduce the number of outfalls that each Phase I city and county is required to sample from 3 to 2.
- The number of required sampling locations for Phase II should be derived from the population served by the MS4, not the entire city or county population.
- Cities should be reclassified based on their current populations.
- Would small seasonal or perennial, non-fish-bearing streams be acceptable as monitoring sites instead of stormwater outfalls?
- Sites need not be suitable for *permanent* installation of sampling equipment. Selected sites should be changed as prioritized areas change.

Representative land use

- The permit should allow cities and counties to recommend the three most representative locations, especially since the ratios of industrial and commercial land use varies considerably from one jurisdiction to another.
    - Many basins with one outfall will not meet the land use qualifications (80% or more of a particular land use).
    - A city with very little industrial land use may best sample (1) low density residential, (2) high density residential, and (3) an area of mixed commercial and industrial that is representative of those two land uses city-wide.
    - The purpose of the monitoring is to provide for adaptive management of the SWMP. Isolation of land use types is impracticable.
    - What *size* of basin is representative of the SWMP in reducing pollutants? Should be large enough to be comprehensive, and not reflect just a few structural BMPs and site inspections.
    - Require permittees to identify a measure of the representative land use for evaluating effectiveness of the SWMP at controlling a stormwater-related problem under [S8.B in Phase I/S8.C.1.b in Phase II].
- Include roadways as a land use since, in urban environments, roadways can represent up to 25% of the land area.
- Phase I counties should monitor only two outfalls, each representative of one of the following land uses: commercial, low density residential, high density residential, and roadway.
- Phase I cities should monitor only two outfalls, each representative of one of the following land uses: commercial, high density residential, industrial, and roadway.

- Permittees should be allowed to establish monitoring stations at two sites having the same land use in a paired watershed approach. This would allow for investigation of observed differences in EMCs.
- It is impractical to designate land use associated with chosen monitoring points. Stormwater drainage basins are not coincident with land use types.
- Land cover should be accurately defined if the purpose is to pool data for comparable sites or rank sites according to land use metrics. The land use descriptions in the draft permit/fact sheet are too vague.
- Do sites need to be completely built out to limit factors from land development that would confound trend analysis?
- What other basin characteristics need to be known to compare results between basins? Examples are slope, soils, air quality, area, age of development, EIA, area treated by BMPs, etc.

Response to the range of comments:

Number of required sites

- Ecology believes that the level of effort, or the number of required sites, identified in the final permits is appropriate based on the sizes (current populations) and resources of the jurisdictions. Ecology has revised the number of outfalls to be monitored in the Western Washington Phase II permit for consistency with the Eastern Washington Phase II permit. Ecology recognizes that robust stormwater sampling is neither simple nor inexpensive. The purpose of the monitoring is not to measure compliance with WQS, but rather to provide another tool to assist in evaluating overall SWMP and permit effectiveness. Regardless of the number of sites identified for monitoring in these permits, additional information will need to be gathered to assess overall effectiveness of the SWMPs and the impacts of MS4 discharges on water quality.
- At this time, Ecology intends for each of these sites to be used for multiple permit cycles. Based on future information and other sampling initiatives, this could change.
- Outfalls/conveyances selected for sampling do not need to ultimately discharge through an MS4 outfall to surface water, provided the SWMP is being implemented in the basin represented by the conveyance. Ditches and intermittent streams that flow only during runoff events (e.g. do not have an annual period of baseflow) may be selected for sampling, provided they are suitable for permanent installation of sampling equipment.

Representative land use
Note: see also RTC for "Purpose of Stormwater Monitoring"

- Sites are not limited to basins with one outfall.
- Ecology agrees that some adjustments to the land use categories provided in the formal draft permits may be appropriate.
- Ecology agrees that roadways are a land use of interest for stormwater management. Due to the nature of stormwater collection and conveyance in municipal areas, roadways (and stormwater management on roadways) are

represented by all of the targeted land uses. Ecology suggests that permittees consider framing one or both SWMP effectiveness monitoring questions (S8.B in Phase I/S8.C.1.b in Phase II) to specifically target their SWMP for roadways.
- Ecology supports the idea of paired basins and suggests that adjacent jurisdictions work together to choose basins that meet that type of study need in order to benefit local planning.

RTC # 1.27 Phase I Stormwater Sampling Requirements

Summary of issue: What are the appropriate sampling requirements for the Stormwater Monitoring section of the Phase I permit?
Commenter(s): C1, C4, C6, P1, P2, P3, P4, P5, P6, P7, P9, P13, P14, P16, W44, W53
Permit(s) affected: Phase I permit
Permit section(s): S8.A
Range of comments on the issue:

General comments
- Keep the requirements for stormwater monitoring in S8.A.1 and 2.
- Make the stormwater monitoring program requirements technically feasible and reduce the impact of the required monitoring on other SWMP elements by reducing the required level of effort and addressing the technical difficulties raised in other comments.
- Consider allowing permittees to develop their own plans to measure long-term trends.
- Such basic monitoring is the purview of the state and goes way beyond what is required to ensure that permittees are complying with the permit and with state and federal law. This is an unfunded mandate.
- Land cover change should be measured as part of the permit.

Numbers and types of samples collected
- 1. Is a "qualifying storm" one that meets all of the criteria detailed in S8.A.2.a.i(1)-(2) of the Phase I permit?
- 2. Please clarify antecedent dry period vs. inter-event dry period.
- 3. The inter-event dry period of 6 hours is used inappropriately in the draft permit. Pollutants build up on surfaces between storm events. A minimum of two weeks separation between sampling events is more appropriate. Measured rainfall amounts that are greater than 6 hours apart are considered separate storm events and should not be composited as a single event.
- 4. What is Ecology's basis for requiring sampling of 75% of the qualifying storms?
- 5. It seems that 75% of the qualifying storms in western Washington would equal far more than 15. What is the justification for requiring sampling of so few storms? The maximum number of storms to be sampled should be doubled.
- 6. Change the minimum rainfall from 0.1" to 0.2" because smaller storms often do not generate enough runoff for successful sampling, especially in small basins that are more likely to represent a single land use. Smaller storms are often more

localized and can be more difficult to target for sampling due to less reliable forecasting.

- 7. The rainfall duration should be "a minimum of two times the time of concentration for the basin and up to a 24 hour maximum." Sampling less than the time of concentration would result in a storm sample that represents only the stormwater immediately upstream from the sampling location rather than from the entire basin. In general, a majority of pollutants are believed to be "washed off" as the storm continues, with concentrations decreasing over time. Any concentration after 24 hours would be dilute in comparison to the first 24 hours. Sampling longer than 24 hours also requires additional field work and could compromise sample integrity by violating holding time requirements.
- 8. S8.A.2.a.i(1) the maximum number of storms to be sampled each year should be 5 rather than 15.
- 9. S8.A.2.a.i(1) the maximum number of wet season storms to be sampled each year should be 8 rather than 15; in S8.A.2.a.i(2) the maximum number of dry season storms to be sampled each year should be 2 rather than 75% of the qualifying storms. This change provides the desired 80%/20% distribution of samples collected, if enough storms occur. A total of 10 storms is reasonable for Seattle and Tacoma; 15 is not reasonable. It will be difficult to ratio the number of wet to dry season samples. A specific number in each category will be easier to implement.
- 10. Suggested edit for S8.A.2.b: "Each sampled storm event shall be sampled using flow-weighted composite storm sampling. As a guideline, at least 75% of the total storm runoff event volume should be sampled if the storm is less than 24 hours. If the storm is longer than 24 hours, 75% of the total storm runoff event volume of the first 24 hours should be sampled. Samples should be analyzed from the constituents/parameters listed below." It is not possible to sample 100% of the runoff volume due to equipment limitations and malfunctions, flow pacing estimations based on unreliable forecasts, and long duration storms. The recommendation here is based on the TAPE protocol (p. 17), "At least 10 aliquots should be composited, covering at least 75% of each storm's total runoff volume up to the design storm volume."
- 11. Suggested edit for S8.A.2.c: "Toxicity testing of one "seasonal first-flush" storm event during the permit cycle. A "seasonal first-flush" storm event is defined as…"
- 12. Wouldn't first-flush data be extremely variable from storm to storm and year to year? How many first-flush events will be required to begin to discern trends with time by land use?
- 13. Toxicity testing of the first flush may be limited by the availability of laboratories that do the testing (i.e. limited specimens, synergy of everyone sampling the same storm). To reduce the overall number of tests for a given storm, each permittee could identify 20% of the samples to be tested in the first year and rotate the sites selected in the following years.
- 14. If data are required for bio-accumulative toxins, perhaps some type of tissue monitoring from organisms or artificial substrates would be more appropriate

- 15. Change requirement in S8.A.2.e from 1 to 3 samples per year to 1 per permit cycle.
- 16. Monitoring should be conducted during all seasons and under various weather conditions.
- 17. Would small seasonal or perennial, non-fish-bearing streams be acceptable as monitoring sites instead of stormwater outfalls?
- 18. Would biological and other monitoring in stormwater dominated streams be adequate to determine trends?
- 19. The permit states that the sites must be suitable for permanent installation of monitoring equipment. Are the sites intended to be used for multiple permit cycles? It would seem necessary to meet the objective of trends in loading.
- 20. Provide or reference guidance on how to cost-effectively collect data required to measure and track long-term trends in loading.
- 21. There should be sites above and below at least one outfall in each urban basin.
- 22. Summary of City of Seattle's 9 pages of comments in opposition to the inclusion of S.8.A. into the permit:
    - We don't need these data to make decisions. We know where the majority of the problems are and can take reasonable actions to address them
    - We could put the money spent on this monitoring to better use, i.e., more controls.
    - The data are not going to prove useful in trend analyses and management decisions. Too much data has to be collected at too great a cost to detect any likely trends. If it was possible to collect 15 samples per year, it would take 35 years to collect enough samples (529) to detect a 10% reduction in pollutant loading at 95% confidence.

Parameters to be analyzed

- 23. Methods and reporting limits for each parameter should be specified. Provide a baseline QAPP including this information.
- 24. What is the basis for requiring so many parameters?
- 25. Six liters of water are required to analyze for all of the listed parameters; and 12-18 liters would be required for QA/QC samples. It will be very difficult to collect a sufficient volume of water for every storm. The parameters should be prioritized based on the available volume of water for a given storm.
- 26. Are all of these parameters required to determine loading trends?
- 27. Monitoring for trends in trace pollutants such as PAHs and pesticides probably would be better accomplished by means other than stormwater monitoring. The basis for stormwater monitoring vs. other methods is not established in the fact sheet.
- 28. Most of the pesticides listed in the permit do not have EPA recommended water quality criteria, and these constituents are not the basis for placing water bodies on the 303(d) list. Many degrade fairly quickly, and analytical methods require large volumes of water. Ecology needs to better assess the environmental significance of these chemicals before requiring their routine analysis in this permit. The permittees should not be forced to conduct basic research.

- 29. Revise the parameter list to include analysis *only* for TSS, TPH, dissolved copper, dissolved phosphorus, and hardness. TSS, TPH, certain dissolved metals, and nutrients are the parameters used in the Stormwater Manual BMP selection process. These parameters are also controllable by actions required in the permit.
- 30. If TMDLs are important, and most are for fecal coliform, temperature and sediment, the permit should focus monitoring efforts on those parameters. For other parameters, defer to the collaborative regional process.
- 31. Parameters should include phosphorus, nitrogen, surfactants, and fluoride to help identify illicit connections.
- 32. Add surfactants to the parameter list. This is a major urban pollutant.
- 33. Keep metals and phthalates in the parameters to be tested in S8.A.2.b.
- 34. Drop the requirement to sample for the insecticides diazinon and chlorpyrifos. Although these were detected in past studies, they have been banned and therefore are not expected to be detected at past levels.
- 35. Add a requirement to sample for nonylphenol to characterize the presence of surfactants.
- 36. Replace S8.A.2.b.i with:
    i. Rainfall event data including antecedent dry period and rainfall
    ii. Flow and hydrograph data including total and sampled runoff volumes
- 37. S8.A.2.b.iii delete "if tidally influenced." Conductivity is an inexpensive measure that can be useful in evaluating groundwater inputs and illicit discharges at non-tidally influenced locations.
- 38. Edit S8.A.2.b.v as follows: "Metals including, at a minimum, total and dissolved copper, zinc, cadmium, lead, and mercury"
- 39. S8.A.2.b typo: delete the "and" at the end of x and put it at the end of ix
- 40. Recent information about copper toxicity to the olfactory systems of fish and observations of pre-spawn mortality in returning coho salmon indicate that stormwater toxicity may not be best evaluated by the acute daphnid tests specified in S8.A.2.c. Additional specifications may be required: should samples encompass particles in transit during the first flush? Should multiple samples be required to characterize variability and/or seasonal differences?
- 41. Edit S8.A.2.d as follows: "Permittees shall make a reasonable attempt to collect grab samples each storm event for the following constituents/parameters:" A majority of stormwater events occur from 1-5 a.m. Grab samples are difficult and sometimes unsafe to collect at night and during the first part of the storm.
- 42. S8.A.2.d.ii what is the purpose of this parameter? Fecal coliform is omnipresent in stormwater and almost always exceeds WQS by an order of magnitude. A more useful indicator of health risk is needed. Please consider substituting another parameter.
- 43. Delete S8.A.2.e sediment sampling. The scope of NPDES required monitoring should be limited to water quality parameters.
- 44. How will sediment sampling meet the stated objective of monitoring pollutant loading trends?
- 45. Reduce sediment sampling to only 1 independent sampling per year. Traps generally cannot collect sufficient sediment for more than 1 sample per year.

- 46. Sediment traps are useful for source tracing given that they are installed at the end of the pipe to represent cumulative effects and that they are left in place for an extended period of time (3-6 months) and collect sediment from a variety of storms (i.e. a range of volume, duration, and intensity). It is inappropriate to evaluate sediment trap date using sediment quality criteria because storm drains provide neither habitat nor points of compliance for aquatic life.
- 47. The Phase I permit states that chemicals that are below detection limits after 2 years of sampling may be dropped from the analysis. What are the detection limits for the chemicals listed in S8.A.2.b-e?
- 48. Can previous monitoring data be used to remove parameters from this list?
- 49. Instead of collecting data and then dropping parameters, a monitoring project should start with an understanding of which pollutants will need to be measured to meet the objective. The QAPP should determine how the objectives are met.
- 50. Given the limited nature of the monitoring program, we question whether parameters should ever be dropped as is suggested in S8.A.2.b and e. The last sentence of both of these sections should be modified as follows: "Chemicals that are below detection limits after two years of data may be dropped from the analysis, provided that the Permittee has complied fully with the requirements of S8."
- 51. The permit should require testing of receiving water for hardness and turbidity both upstream and downstream of the discharge. This is the only way to determine whether a stormwater discharge is causing or contributing to a WQS violation.

<u>Response to comments:</u>

Response to General Comments
Ecology has retained the stormwater discharge monitoring required in special condition S8.A. of the permit. We have modified the requirements to incorporate some of the comments received on the draft. Ecology considers this stormwater monitoring requirement to be one of the most basic responsibilities of the permittees. The permittees are responsible to meet federal and state statutory and regulatory requirements. The monitoring provides a feedback loop concerning the effectiveness of the overall stormwater programs in reducing the discharge of pollutants to waters of the State. The cost of the monitoring program is substantial, but is a small percentage of the overall cost of a comprehensive stormwater management program, and provides direct feedback on pollutant reduction.

Numbers and types of samples collected (responses to numbered comments above)
Types of Sites Monitored

- 17. No, small seasonal or perennial, non-fish-bearing streams would not be acceptable as monitoring sites instead of stormwater outfalls for the goals we have specified.
- 19. Yes, the sites are intended to be used for multiple permit cycles.
- 21. Ecology is pursuing receiving water monitoring outside the scope of this permit.

General Sampling Guidance

- 20. We are unaware of guidance for stormwater on how to cost-effectively collect data required to measure and track long-term trends in loading.
- 41. Regarding S8.A.2.d collecting grab samples, Ecology expects permittees to anticipate and plan for methods to safely obtain samples. If, in spite of these preparations, field staff find that sampling puts them in an unreasonably high-risk situation, they should not risk their safety. Substitute sampling (Grab samples from a different qualifying event) can be done.

Qualifying Storms

- 1. A qualifying storm is one that meets the criteria in S8.A.2.a.i.(1) or (2) of the Phase I permit.
- 4. Ecology's basis for requiring sampling of 75% of qualifying storms is to set a minimum number of storms that should be captured. We want to get enough data as a basis for projecting annual loads and capturing the relative occurrence frequency of some pollutants. There would be significant cost and logistical difficulties in capturing all storm events. Yes, the number of qualifying storms should be far more than 15 in a normal rainfall year.
- 5. Seventy five percent of the qualifying storms should be far more than 15 storms. However, 15 storms that meet all of the criteria for a qualifying storm can give us an adequate range of storms from which to make reasonable annual load estimates and determine the relative presence or absence of pollutants. Also, the permittees need an upper limit to the number of sampling events so they can budget for the effort.
- 6. The 0.1 inch minimum rainfall originally came from EPA NPDES Storm Water Sampling Guidance Document 1992 833/B/92/001. Designating a minimum of 0.2 inches might not give us the number of storms we want. If a basin doesn't generate enough runoff on such a small storm, then it can't be used as a sampled storm event. If, however, it does generate flow and meets the other criteria, we don't necessarily want to exclude it from the range of storms that can be sampled.
- 7. Rainfall and Sampling duration: The intent is to try to get a composite sample that includes an aliquot from all areas of the basin. The larger the factor, the fewer potentially qualifying storm events. The commenter suggested specifying a minimum rainfall duration that is 2x the max. time of concentration. That suggestion seems off-the-point. It seems that what you want is to assure that your sample be taken over a time period that includes runoff from all points of the basin. That has nothing to do with rainfall duration. The permit has been modified to indicate that the sampling duration has to extend beyond the longest estimated time of concentration for the basin. That should result in including stormwater from all areas of the basin.

  On the issue of setting a maximum sampling time, we agree that a sampling requirement that does not have a maximum cut-off point could be extremely difficult to implement. Two commenters, Seattle and Tacoma, had somewhat similar proposals. We have changed the text to allow sampling to cease after 24 hours.

- 8. We think we need to specify a maximum number of storms to be sampled each year so local governments can budget; but the number has to be one from which we can produce a reasonably accurate estimate of loading.
- 9. The intent of the wet season to dry season sampling ratio is to try to maintain the same ratio as the amount of wet season to dry season rainfall totals. That should help in giving proportionate weight to the sampling results. We have changed the permit text to give a range that is appropriate for the permitted areas based upon historical rainfall patterns. One commenter suggested changing the minimum storm size to 0.2 inches and also changing the maximum number of storms to 10. If Ecology maintains a smaller qualifying storm size of 0.1 inches, there should not be a problem with obtaining 15 storm events.
- 10. Regarding sampling 100% of the runoff volume, See above. Need to determine a minimum number of aliquots. TAPE says min of 10 aliquots. After discussion with personnel who have field experience, Ecology has changed the text to indicate that 10 aliquots is an acceptable target to try to achieve. However, samples in which 7 – 9 aliquots have been collected are generally representative of the storm event and can be acceptable if other criteria are met.
- 15. One sediment sample per permit cycle is not enough. Experience with sampling in the Thea Foss Superfund program indicates at least one sample per sediment trap can be collected per year.
- 16. We would like monitoring to be conducted during all seasons and under various weather conditions, however, the more one tries to specify an acceptable spread of sampling times and other storm criteria, the more likely one is to not have enough storms that meet those various criteria. We hope that the criteria we have specified will give us a representative x-section and sufficient number of storms.

Dry Period

- 2. To clarify antecedent dry period vs. inter-event dry period: antecedent dry period sets the minimum time period and the maximum rainfall amount that can immediately precede the onset of a qualifying storm. These minimum times are set in order to allow some amount of pollutant build-up between sampling events. The Inter-event dry period of 6 hours identifies one storm event from another. If it has not rained for 6 hours, the previous event has ended, and the onset of any rainfall thereafter begins a new event – but not necessarily a qualifying storm event.
- 3. We do not believe we have inappropriately used the concepts of antecedent dry period or Inter-event period. We do not agree with using a minimum of two weeks between sampling events as a criterion for qualifying storms. The commenter has not indicated that no rainfall can occur within that two week time period, so the criterion they have suggested does not guarantee pollutant build-up. Inter-event is the time when it stops raining to when it starts raining again. A rainfall event of ½ hour qualifies as a storm event if it has 0.1 inches. We are concerned about getting enough events to characterize the whole year. It is more lenient so we can be sure of getting enough storm events.

Toxicity Testing

- 11. We agree. The explanation of a seasonal first flush event stands as a separate sentence.
- 12. We don't know whether we will see variability from storm to storm and year to year; but the Department thinks it is useful to have some indication of seasonal toxicity of these stormwater discharges. There is value in knowing whether there is toxicity there or not. There is additional value in any indication that toxicity may be increasing or decreasing over time. We don't know whether or how much first-flush event data will be necessary to discern trends over time by land use, but we feel it's necessary to start collecting information.
- 13. Regarding rotating sites in the following years, it is harder to see trends if sites are not consistently tested. We are already concerned about the limited number of toxicity samples taken for toxicity testing (1/outfall/year) specified in the draft permit.
- 14. Commenter suggests, 'If data are required for bio-accumulative toxins, perhaps some type of tissue monitoring from organisms or artificial substrates would be more appropriate.' Tissue monitoring doesn't answer the question of where the toxics came from. Fish, mussels, or SPMDs require extended exposure (weeks to months) in the receiving stream before accumulating sufficient bio-accumulative toxins to measure. Fish move around too much to be reliable indicators of source. These techniques are also relatively expensive.
- 18. Would biological and other monitoring in stormwater dominated streams be adequate to determine trends? We think it can be. We are pursuing a monitoring strategy outside the scope of these permits to collect such information.
- 40. Ecology has changed the toxicity test requirement to a rainbow trout test. The purpose of this toxicity testing is to get a relative idea of the toxicity of the monitored discharges; to make a reasonable analysis to estimate the likely pollutants that are causing the toxicity; and to track the relative toxicity over time to see if the municipality's stormwater program is reducing that toxicity. Each type of toxicity test has its advantages and drawbacks. The rainbow trout test was selected because it is an organism closely related to species of interest – various types of salmonids. We anticipate that the rainbow trout test will be sensitive to the presence of oils and various organic chemicals. It will not be as sensitive to metals concentrations. However, many of the stormwater management control actions that should reduce the concentrations and loadings of organic contaminants will also reduce metals contaminants. Therefore, the test should serve the purpose of weighing the relative effectiveness of the Permittee in reducing overall toxicity of its discharges.

Ability of Monitoring Program to accomplish goals

- 22. Response to City of Seattle
  We have very little information about the overall effectiveness of our municipal stormwater programs in reducing the presence and loading of various types of pollutants that are generated by the urban landscape. The City argues that we intuitively know that various actions required of stormwater programs (source controls, treatment facilities, maintenance of existing facilities, rule enforcement,

and public education) should reduce the pollutant loading. But we have very little verification about how much pollutant reduction is possible given implementation of all those actions. And, we have very little feedback about the effectiveness of any particular permittee's stormwater program in achieving pollutant reduction. Only in the case of the Thea Foss Waterway in Tacoma do we have a history of information from which we can make estimates of the effectiveness of a strictly source control program (i.e., no retrofitting of structural controls) in reducing the discharge of certain pollutants.

If the operative regulatory requirement is to reduce pollutants "to the maximum extent practicable", we need some feedback about how much pollutant reduction we are achieving for the level of efforts that the municipalities are putting forth. For instance, in most of the areas covered under the municipal stormwater permits, treatment and hydrologic controls do not exist, and the municipalities do not have extensive plans to retrofit structural controls into those areas. Just how much pollutant reduction is possible through the other types of actions? It would be informative to see how much pollutant reduction is possible in an area where structural retrofitting of treatment facilities is added to aggressive source control, maintenance, rule enforcement, and public education efforts. And, it would be informative to see how much those combined efforts would cost so that we can make more informed decisions about what might be the maximum extent practicable pollution controls.

Concerning the usefulness of the stormwater outfall monitoring requirements, the City suggests that a 10% reduction in pollutant concentrations over a 35 year period would be an "admirable achievement." Ecology disagrees. A 10% reduction in pollutant loading from the existing land development would not likely make a significant difference in the achievement of the nation's and state's goals for our waterways. It is unlikely that it would even offset the increase in pollutant loading that will occur because of new development in that time period. So, what the comment suggests is that we are destined to fight a long-term battle to reduce the rate of increase of pollutant loading to the state's waters. Such a goal cannot be accepted. Ecology is not inclined to approve stormwater programs that achieve so little over 35 years – at least, not without more information that informs us of the impracticality of achieving more.

Therefore, Ecology suggests that the permittees select outfall monitoring locations in basins where they intend to aggressively pursue structural and non-structural pollutant control measures. In those basins, we are more likely to detect significant pollutant reductions, and we can get a gauge of the jurisdiction-wide cost of trying to expand such an effort. That will allow for better informed decision-making on the costs and benefits to protect and improve our aquatic natural resources. Ecology also suggests that it will be necessary to make cost-significant management decisions with less than 95% statistical confidence. The combination of less statistical confidence with monitoring in selected basins where we expect significant pollutant reductions because of concerted efforts at

structural and non-structural controls should translate into detection of trends at less cost and in a shorter time frame.

Parameters to be analyzed

Reporting Limits

- 23. Ecology has added Appendix 9 that details acceptable methods and reporting limits. Methods and reporting limits for each parameter should be provided in the QAPPs that will be submitted under the permit requirement. Deviations from the methods and reporting limits can be proposed by the Permittee but must be justified as adequate to meet the range of likely concentrations. Permittees are not guaranteed approval of their alternative proposals.
- 36. Ecology has modified the format to provide clarity on the permit requirements in regard to collection and reporting of rainfall and flow data.
- 47. The actual detection limits will be a fraction of the actual reporting limit of the data. We have added target reporting limits in Appendix 9 of the permit. The annual reports should identify the actual detection limit for the analyzed samples.
- 48. Generally, previous monitoring data cannot be used to remove parameters from the list. However, if the previous samples were collected at a site proposed for this long-term monitoring; and the samples were collected under a QAPP approved by Ecology, and if the raw data and analysis were accepted by Ecology's WQP and the MDL's were sufficiently low, then it is a possibility.
- 49. All of the pollutants listed can be useful in meeting the objective. If, however, the sample results from the chosen monitoring site are below detection limits, it is likely not productive to continue sampling for that pollutant. In most cases, we will not know ahead of time it that is going to happen.
- 50. There can be reasons for a permittee to have not complied with some provision of S8 that is not at all related to this issue.

Parameter Prioritization and type

- 24. The parameters are required because they are all common to urban stormwater and can have natural resource impacts.
- 25. We agree that the order of analyses of sediments and water should be prioritized because there may be instances where a sufficient volume of water is not collected. The permit has been revised to indicate a priority order.
- 26. All of these parameters are required to determine loading trends except conductivity, chloride and hardness.
- 27. The commenter contends that some other type of monitoring would better serve the goal of looking for trends in trace pollutants such as PAH's and pesticides. Because no other means was provided, it is difficult to respond. The commenter may be suggesting that surrogate monitoring, such as pounds of pesticides sold within a certain area, would be more effective. Ecology does not agree with that surrogate monitoring is a better approach.
- 28. The pesticides in the permit have often been detected in stormwater and local streams. They have toxic effects in extremely low concentrations. Despite not being explicitly listed in the Water Quality Standards, it is important to reduce their frequency of occurrence and concentrations. Ecology disagrees that this is basic research, and permittees are not required to conduct basic research. It is a

responsibility of permittees to know what pollutants are discharged by their storm sewer system and to take actions to reduce those pollutants.

- 29. Same as 28. The listed parameters are common in stormwater, and can have impacts. We want to have stormwater management programs that are successful in reducing the incidence and concentrations of the pollutants listed for monitoring.
- 30. Regarding focusing on TMDL parameters, answer is same as above.
- 31. There is a different program to identify illicit connections. Identification of illicit connections is not a goal of this portion of the permit.
- 32. Surfactants can have significant impacts on receiving waters and can be present in varying degrees in urban stormwater runoff. Rather than requiring the specific identification of surfactants, which could add substantially to monitoring costs, Ecology has added a requirement to analyze for methylene blue activating substances. This simple test gives a good estimate of the amount of anionic surfactants in the discharge.
- 33. The final permit has retained monitoring requirements for phthalates and metals.
- 34. Although banned, these chemicals (insecticides diazinon and chlorpyrifos) continue to show up, not only locally, but across the country.
- 35. Regarding adding a requirement to sample for nonylphenol to characterize the presence of surfactants. Nonylphenols are strongly hydrophobic and bind to organics in sediments. They are also persistent. This means relatively few sediment samples would be adequate for characterizing environmental concentrations. However, measuring nonylphenol in sediments would not direct permittees to source control because the nonylphenol found would have accumulated over a long time and broad area containing many potential sources. Measuring methylene blue activating substances (MBAS) is a well-established and inexpensive method for assessing anionic surfactant levels in wastewater and receiving water. MBAS analysis would be better in source control efforts for detergents in storm water.
- 37. Conductivity can be useful in evaluating non-tidal locations. Ecology removed words “if tidally influenced.” A more useful indicator of health risk may be needed; this permit is not the vehicle to determine that.
- 38. The sentence construction suggested by the commenter doesn’t provide the necessary clarity for the purpose of the permit.
- 42. We have Water Quality Standards for fecal coliform bacteria. A more useful indicator of health risk may be needed. However, this permit is not the vehicle to determine that. Stormwater discharges do contain high levels of bacteria and can contribute to high levels of contamination. Municipal stormwater programs include source control measures intended to reduce sources of bacteria. We would like to see if the measures are making any progress in controlling this parameter. This process will have input into what measures may be possible to specify for TMDLs on this pollutant.
- 51. Ecology has decided to explore receiving water monitoring outside the scope of this permit.

Sediment Sampling

- 43. Ecology's Sediment Management Standards (SMS) are considered part of the Water Quality Standards. It is appropriate to include sediment monitoring in an NPDES permit.
- 44. The preferred proposal for sediment sampling to meet the objective of monitoring pollutant loading trends is in-line sediment traps. Tracking pollutant changes in the sediment traps is a way to determine an indication of higher or lower loading.
- 45. Ecology has changed this section to specify one sediment sample per year per site. Experience in the City of Tacoma's program indicates at least one sample per sediment trap can be collected per year.
- 46. Sediment trap data may be used to track the quality of sediment discharged over time. It may also be an indicator of a sediment quality criteria problem in receiving waters. However, sampling in the receiving water sediments would be necessary to confirm or refute the situation.

RTC # 1.28 S8 Phase II Monitoring Requirements

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Summary of issue: What should the monitoring requirements for Phase II jurisdictions be during this permit term? The formal draft permit requires no monitoring (except for TMDLs), but requires permittees to prepare for future stormwater monitoring.

Commenter(s): C4, C5, C6, E3, E6, E12, E13, E16, E19, P4, P9,
W1, W2, W3, W5, W7, W9, W12, W13, W14, W17, W18, W19, W20, W22, W23, W24, W28, W30, W39, W40, W41, W42, W44, W47, W50, W53

Range of comments on the issue:

- Require permittees to do ambient monitoring as well as stormwater monitoring
- Make Phase II W WA permit requirements for monitoring the same as Phase I
- Monitoring requirements can be different for different-sized jurisdictions; require largest Phase II jurisdictions to meet Phase I requirements
- How is monitoring MEP and AKART for Phase I but not Phase II?
- Monitoring is required in permits under 308(1) of the CWA "whenever required to carry out the objective of this chapter"
- Monitoring feedback is critical to adaptive management approach
- Require monitoring to identify a baseline for evaluating future trends
- Jurisdictions need to support/enhance Ecology's TMDL sampling
- Require more outfalls (broader range, more representative sample) and a timeline for BMP evaluation
- Consider San Diego permit approach www.swcrb.ca.gov/rwqcb9/programs/stormwater/sd%20permit/Reissuance/Final%20Tentative%20M&R%20Program.pdf
- Require monitoring during this permit term (less than 5 year schedule); permit not likely to be reissued on time in 5 years; waiting until next permit term will not produce timely information to address problems; absence of monitoring does not support Puget Sound recovery goals; requirement to plan for future monitoring is not adequate
- Need to require monitoring so that permittees can secure funding for sampling

- Permit should require coordination to increase efficiency and effectiveness
- Ensure that monitoring of shared water bodies and common SWMP elements is coordinated; some permittees already have cooperative agreements and are concerned that permit requirements will hamper their abilities to implement existing plans
- Prefer a coordinated, comprehensive monitoring strategy to current requirements. In particular, multiple jurisdictions requested that Ecology form a stormwater monitoring partnership responsible for:
    - Coordinating with the State on a stormwater baseline and trend assessment monitoring strategy at a watershed level that would link and coordinate with salmon recovery and Puget Sound Initiative programs.
    - Developing and replacing existing monitoring language in Phase I and Phase II permits with language that reflects a monitoring program that would provide:
        - Meaningful management information for improving BMP selection and making other stormwater management decisions,
        - Reliable indicators that SWMP actions were making reasonable progress towards desired outcomes, and
        - Coordination and analysis of information across jurisdictions and agencies through the partnership to reduce redundancies, realize efficiencies, and improve transparency.
- If a partnership is formed and fails to produce a tangible program, permit should contain fallback requirements
- Monitoring approach should involve all entities that discharge to streams in a basin and all Ecology divisions with monitoring requirements (not just stormwater).
- Current approach is vague, arbitrary, redundant, inefficient, not transparent; current approach won't produce information meaningful for managing stormwater, evaluating SWMP effectiveness, or protecting receiving waters; what is the rationale/objective for S8 requirements?
- Why do permittees need to monitor to justify/confirm Ecology requirements; "best available science implies Ecology knows BMPs to be effective"
- No additional water quality data are needed (for certain locations)
- Scale back monitoring planning requirements
- Stormwater monitoring is difficult to conduct in a defensible manner; need standardized methods; technical requirements are beyond the means of most Phase II jurisdictions; too expensive, even just to prepare per S8 requirements
- SWMP effectiveness monitoring not likely to be appropriately designed
- Permittees should be allowed to determine what monitoring is needed based on their SWMP
- Implied monitoring requirements for Phase II next permit term exceed federal requirements and intent; unfunded mandate
- Do not include monitoring as part of this permit; delete entire section
- Monitoring creates liability for permittees

Response to comments:

Ecology agrees that monitoring feedback is critical to the adaptive management process that forms the basis of this permit. Ecology also agrees that stormwater monitoring provides unique challenges. From the beginning of the public process of developing these permits, Ecology shared our intention with Phase II jurisdictions and other stakeholders that, for this permit term, stormwater monitoring requirements (with the exception of any identified in an approved water cleanup plan) would not be included in this permit. Ecology has, however, identified planning responsibilities so that stormwater monitoring may begin very early in the second permit term.

Preparing for monitoring that will be conducted during the second term of this permit is consistent with the EPA requirement in CFR 122.34(g) that calls for evaluating the appropriateness of identified BMPs in the SWMP. With this permit, Ecology is phasing in the adaptive management process for this permit. Stormwater Management Programs will not be up and running until near the end of this permit term, and there are other evaluation methods required during the permit term.

Ecology has committed funds and begun a process of forming a monitoring partnership that should address ambient monitoring of urban streams and will hopefully provide direction for the specific stormwater monitoring requirements included in future permit cycles. The planning and site identification requirements in the current permit are needed to support the monitoring partnership effort. Future permit requirements will be integrated with and informed by the monitoring partnership.

RTC # 1.29 Targeted Stormwater Management Program Effectiveness Monitoring

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Summary of issue: Comments on Stormwater Management Program Effectiveness Monitoring

Commenter(s): C4, E14, P5, P6, P7, P11, P13, P14, P16, W13

Permit section(s): Phase I - S8.B, Phase II WW – S8.C.b, Phase II EW – S8

Range of comments on the issue:

- Management program effectiveness monitoring should define the measures of success, specific thresholds of concern, and attainable thresholds for flow/channel effects and or a given pollutant. (C4)
- The vagueness of the objective will likely result in a collection of disparate studies that is essentially anecdotal due to their small scope and differences in methods. WDOE will miss an important opportunity to systematically evaluate the outcome of the application of a suite of BMPs, used by different permittees, in different watersheds. (C4)
- The "questions" are statements or areas of research, not questions. (P5)
- This requirement has the potential to produce good information to better manage stormwater. The decision to include the problem and hypothesis in the design is key. (P5)
- Edit the language in S8.B.1 to delete reference to questions and instead call for two monitoring programs, one to address the effectiveness of an action the other to address an outcome. (P6)

- Delete the requirement that mandates either stormwater or receiving water monitoring as part of the management program effectiveness monitoring. Surrogates measures such as changes in the amount of pesticides sold should be adequate. (P6)
- If Ecology opts to require stormwater or receiving water monitoring as part of the management program effectiveness monitoring, then add sediment monitoring as an option. (P6, P7)
  Proposed language change:

  2. The monitoring ~~shall at a minimum~~may include either stormwater ~~or~~, receiving water, or sediment monitoring of physical, chemical and/or biological characteristics. The monitoring may also include data collection and analysis of other programmatic measures of effectiveness such as surveys and polls~~evaluation of regulatory processes, programmatic actions or other similar evaluations~~.

- Change title and content to *Targeted* Stormwater Management Program Effectiveness Monitoring. (P7)
- The permit language suggests that monitoring program quantitative measures alone may show effectiveness. Qualitative measures also need to be incorporated. (P7)
- Requirement to address "a stormwater related problem" is too vague. Require focus on monitoring sediment quality as a central feature of Stormwater Management Program Effectiveness Monitoring. (P11)
- Instead or requiring stormwater or receiving water monitoring, the permit should require both stormwater and receiving water monitoring. (P13, P14, P16)
- Delete receiving water monitoring from stormwater management program effectiveness monitoring. Receiving water monitoring is outside local jurisdiction. (W13)
- In the section listing the elements of the required program change "statement of the problem" to "description of the issue." (E14)
- The stated purpose of stormwater monitoring should be focused on identifying problems and improving conditions in targeted small basins. Monitoring at any one outfall should occur only as long as needed to identify problems and support planning efforts.
- Suggest replace first sentence of S8.A.3 with: "The objective of the stormwater monitoring is to identify subbasin-specific water quality problems and characterize discharges for planning purposes."

Response to the range of comments:

Vague Objective
The specific monitoring objectives for this section are deliberately left to the permittees. The Phase I and Phase II stormwater permittees spend public money implementing stormwater management programs and understandably need direct feedback on what is most effective in the SWMP. Changing the objective to systematically evaluate the outcome of the application of a suite of BMPs used by different permittees in different watersheds will not produce data directly useful to individual permittees. Similarly,

changing the objective to require focus on monitoring sediment quality unnecessarily narrows the objective. SWMPs are designed to address a broad range of problems and the permittees have different priorities that reflect existing conditions and community values. While it is possible the information will only benefit the individual permittee doing the monitoring, it is likely that it will also benefit other Phase I and II permittees, and even communities that are not under permit.

Clarification of title and scope
Ecology agrees that the title of this section of the monitoring requirements is confusing and agrees that adding the "targeted" descriptor should help minimize that confusion. However, the concern about whether the monitoring is designed to answer questions or "statements or areas of research" seems largely a concern over semantics and no change in permit language is warranted. Ecology does not agree with a similar proposal to delete the reference to questions, and instead require 2 monitoring programs, one to address the effectiveness of an action, and another to address the effectiveness of an outcome. This proposal eliminates the need to set a hypothesis into the monitoring design and reduces the usefulness of the data collected.

What to Monitor
Surrogate or qualitative measures alone are not adequate to measure the effectiveness of a targeted action or outcome. Similarly, making stormwater or receiving water monitoring optional is not adequate. Ecology's concern is with the environmental outcome of the management program. Ecology supports collecting information on surrogate or qualitative measures as part of this monitoring program, but is not willing to assume, for example, that reductions in pesticides sales will result in reductions in pesticides in either stormwater discharges or the receiving water without actual data. If reductions in pesticide sales are not accompanied by reductions in the environment, then this is valuable information that other actions are necessary to control the problem.

Ecology agrees with adding sediment monitoring as an option. Receiving water monitoring is not outside local jurisdiction. NPDES permit holders are frequently held responsible for monitoring the effect of their discharge on waters of the state.

Comments on S8.A, stormwater monitoring, stated that monitoring should be conducted to identify problems and characterize discharges for planning purposes. Ecology does not agree with this proposal for the stormwater monitoring, but is in favor of incorporating monitoring for problem or source identification into the SWMP effectiveness monitoring.

RTC # 1.30 BMP Effectiveness Monitoring

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Summary of issue: Should BMP monitoring be required? Which BMPs should be monitored?

Commenter(s): C4, E11, E14, P1, P3, P5, P6, P7, P13, P14, P16, W5, W7, W13, W14, W17, W18, W19, W20, W23, W24, W30, W39, W40, W42, W50

Permit section(s): Phase I: S8.C.2; Phase II E WA: S8.C.1.c
Range of comments on the issue:

- 10 municipalities argued that it was the State's responsibility to determine BMP removal effectiveness. Some of these commenters suggested Ecology use an advisory committee process outside of the permit to establish the monitoring effort using 3rd parties or the municipalities.
- 3 municipalities argued that it will provide little useful information, and its costs will divert money from other programs.
- Commenters from all categories thought Ecology should ensure that a wide range of BMP's are monitored rather than 1 BMP type monitored by everyone.
- Most of the Phase II communities assumed that they were going to be responsible for a similar level of BMP effectiveness monitoring in the future. Their concerns are that such a requirement would involve a lot of duplication of effort and difficulty in quality control.
- A few commented that Ecology should allow monitoring of more treatment options than those listed in the permit, especially LID options.
- Many were concerned that there would not be treatment BMP's designed to the '05 manual standards available to monitor until well after the deadline to start monitoring.
- The federal Services were concerned that Ecology did not provide sufficient monitoring design specifications to ensure a rigorous program allowing for statistically valid conclusions with high confidence.

Response to the range of comments:

Western WA Phase II BMP Effectiveness

- Phase II Permittee Obligations: The draft Western Washington Phase II permit at S8.C.1.c included the requirements prepared for the Eastern Washington Phase II permit concerning preparation for BMP effectiveness monitoring. Those requirements should not have been included in the draft Western Washington Phase II permit. Ecology has not made any decisions in regard to the scope of monitoring for the second round of the Western Washington Phase II permit scheduled for issuance 5 years from now. If the Phase I monitoring proceeds and is relatively successful at identifying a performance range for a number of the public domain treatment BMP's, the need for and scope of any BMP effectiveness monitoring could be substantially reduced. After we gain experience with implementing the monitoring in the Phase I permit, we should expect further discussions on the BMP effectiveness monitoring needs and cost-efficient ways for the municipalities to coordinate in meeting those needs.

  We do not have any information on BMP performance in Eastern Washington. We need to close that information gap. For this permit term, Ecology is requiring the Eastern Washington Phase II permittees to identify potential sites for monitoring.

Whose Responsibility?

- NPDES permit holders are historically responsible for monitoring the quality of the water that they discharge to waters of the state. In addition, those dischargers are responsible for proposing and providing information on the technologies that they will use to comply with their permits. So it is appropriate for Ecology to require monitoring to obtain performance information on a very small percentage of the treatment devices that the local governments have been and will continue to allow to be used in their jurisdictions.

Performance Data Are Already Available

- There is very little pollutant removal performance information on the public domain treatment BMP's that are listed in Ecology's and local governments' stormwater manuals. Most of those treatment practices have been listed as BMP's for many years without any substantive performance information. It is necessary to start to understand the limits of effectiveness of the treatment BMP's that are advocated by local and state governments. This information should be used to endorse, modify, or reject those BMP's.

BMP's are the Presumptive Approach; So Why Monitor?

- The presumptive approach will be strengthened by a firmer foundation. Currently, we must rely on very general knowledge of pollutant removal mechanisms and limited indicators of performance from across the nation to make professional judgments about likely performance of BMP designs in our region. The presumptive approach to compliance with state and federal requirements can only be sustained if we have performance data that identifies a range of typical performance of each BMP under certain design constraints and in situations typical for our region. Such information can lead to better BMP designs and more informed decision making concerning pollution control on a watershed scale, such as in TMDL development.

Provide More Guidance

- Ecology has included within the permit as much information as it had to specify standardized methods to assess BMP Performance. We have referenced pertinent Ecology (Technology Assessment Protocol – Ecology (TAPE), and Quality Assurance Project Plan) and national guidance (ASCE BMP Performance Data Base) pertaining to BMP evaluation. Despite those efforts, there is not sufficient detail in those guidance documents to address all situations and to ensure high quality usable data and consistent information reporting. Therefore, Ecology is considering options for filling that information gap.

Ensure Testing the Range of BMP's

- In regard to making sure that a number of BMP types are investigated, Ecology concurs that it should add permit conditions that will ensure a breadth of BMP's are investigated. But that must be balanced against the need for establishing a reasonable expected range of performance of a single BMP type through monitoring of sufficient sites of that BMP.

Allow Monitoring of Other BMP's

- The draft Phase I permit allowed local governments to propose monitoring of other treatment BMP options that are not on the list that is included within the permit. Ecology will restrict the options to those devices that are intended to fully achieve the treatment requirements. For instance, bioretention swales are a new listed treatment BMP option within the Phase I permit. A proposal to monitor their performance should ensure that the swale is designed to achieve the treatment requirement of 91% of the runoff predicted for the site that it serves.

  For the Eastern WA Phase II permit, bio-infiltration swales are included for metals and oil treatment, but not for basic treatment. Some basic performance data already exist for the Spokane area, and Ecology is especially interested in the performance of this type of BMP for metals and oil removal. Some additional basic treatment information will be obtained from evaluating sites where metals and oil are also a problem.

  Also for the Eastern WA Phase II permit, catch basins were not added because they are not an acceptable basic treatment BMP; however Ecology did add passive oil removal vaults (*e.g.* a chamber with a turned-down elbow) that precede catch basins as a possible oil treatment BMP for site selection. Ecology has conditionally approved this BMP for oil control at the subset of high-use sites that are in the SWMMEW but not the SWMMWW.

BMP's Not Available to Monitor

- Ecology does not anticipate that there will be problems with finding sufficient treatment sites for monitoring. The design criteria for some treatment BMP's (e.g., bioretention swales, filter strips, Wet Pool-type devices) have not substantially changed since publication of the 1992 *Stormwater Management Manual for the Puget Sound Basin*. The 2005 manual does not have substantial changes in the design criteria for other BMP's that were published within the 2001 *Stormwater Management Manual for Western Washington* (sand filters, treatment trains). New BMP options (bioretention, compost-amended filter strips) are being aggressively pursued by some local governments and developers in new development and in re-development projects because of hydrologic and treatment benefits.

Costs Are Too High

- Ecology acknowledges that monitoring can be costly but believes that these costs are necessary to understand what our treatment and flow control strategies are achieving. Because the permittees rely heavily on these practices to control stormwater impacts, we must have information about their performance. The costs are reasonable when viewed in light of the overall costs of these stormwater management programs, and in light of the substantial investment that is made in the stormwater infrastructure in new development and re-development areas. As another comparison, Ecology notes that local governments are spending

substantially more money monitoring the discharge and the internal unit processes and operations of their municipal sewage treatment plants than what will be spent for compliance with this permit.

Define terms

- The term "whole water" means a water sample that is analyzed without any preliminary filtering. The term "full scale field monitoring" is intended to mean monitoring of systems that are handling the full stormwater flow from the site. This is contrasted with laboratory testing or small scale testing where a scaled down version of a BMP is tested on runoff from only a small area, or a small portion of the full scale runoff is directed through a pilot, small system.

RTC # 1.31 Coordinated Monitoring Program; Receiving Water Monitoring

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Summary of issue: Coordinated monitoring programs, receiving water monitoring, use models from other states, watershed-based monitoring programs

Commenter(s): C1, C4, C5, C6, P4, P5, P9, P13, P14, W1, W2, W3, W5, W7, W12, W14, W18, W19, W22, W23, W24, W28, W30, W39, W40, W42, W50

Permit section(s): S8

Range of comments on the issue:

Coordinated monitoring program

- Both the Phase I and Phase II permittees should develop and implement a watershed-based monitoring program. Permittees can play a large role in the implementation of the monitoring program, while WDOE provides essential leadership and overall program evaluation. The roles for WDOE and permittees could include:

  WDOE – design protocols; require training; develop QA/QC protocols and perform the QA/QC role; store, manage and analyze data; and author reports.

  Permittees – collect and report data (C4)
- A central regional authority should submit monitoring plans to Ecology for approval. (C5)
- A comprehensive centralized regional monitoring system should be established, including Phase II. (C5, C1, P4, P9)
- Recommend that Ecology form a stormwater partnership to coordinate stormwater baseline and trend assessment monitoring, and to develop an alternative monitoring proposal to replace proposed monitoring language. (W1, W2, W3, W5, W7, W12, W14, W18, W19, W22, W24, W28, W42)
- An overall science-based, monitoring strategy that can gather watershed data to produce practical results from trend assessments should be managed by Ecology (W42, W50)
- Regional and coordinated monitoring should be incentivized by Ecology. (C5)
- A coordinated program based on a model such as the Southern California Coastal Water Research Project (SCCWRP) should be encouraged for Puget Sound. (C5)

- Use established monitoring programs to give guidance for an effective program, e.g. CALTRANS. (C6)
- Critical that Ecology adopt monitoring protocols to insure consistency. (C5)
- Mandate WRIA-based or watershed-based monitoring (C1, P13, P14)
- The permit should require permittees to work with Ecology and fellow permittees to address complementary issues in the types of monitoring. (P9, W39)
- Consider the approach to monitoring in San Diego's municipal stormwater permit – a collaborative, watershed-based receiving water monitoring program that includes bioassessment. (P13, P14, W30, W40)
- Expand the coordination provision in S5.C.3.b.ii to require development of collaborative monitoring programs to meet the requirements of S8. (P13, P14)
- Encourage you to look at partnering with already established monitoring plans, instead of creating multiple disjointed small monitoring plans as described in the draft permit. (W23)
- Unclear if collaboration allows consolidation of monitoring sites and activities. Please clarify. (W23)

Receiving Water Monitoring

- Receiving waters should be monitored as part of the permit. (C4, C5, C6, P9, P13, P14)
  - To evaluate the conditions of the receiving waters and to determine compliance with applicable standards
  - To identify the extent to which stormwater discharges are impacting receiving waters and sediments.
  - To provide baseline information to compare to stormwater discharges
  - Local governments have an obligation to help pay for such work
  - To determine if numeric effluent limits should be established
  - To aid in enforcement
- To comply with §308(a) of the Clean Water Act this permit must establish monitoring requirements that are sufficient to determine whether stormwater discharges are causing or contributing to violations of water quality standards. (P13, P14)
- Incorporate more measurement of biological endpoints into the monitoring program. This could include toxicity testing of discharge, toxicity of BMP influent v. effluent, invertebrate sampling in receiving waters, and bioassessment. (C4, C6)
- Recommend wet weather sampling of key points within watersheds, including tributaries and at the bottom of the system. (C5)
- Additional contaminants should be included based on PSAMP results to ensure that the receiving waterbody biota data matches up with the proposed stormwater sampling. For example, priority pollutants should be analyzed in stormwater during the same time frame as adjacent sampling for priority pollutants in Puget Sound. (C5)
- In some watersheds, a snapshot approach should be taken in which the entire watershed (key input locations) is sampled simultaneously. (C5)

- Incorporate bioassessment monitoring to characterize nature and extent of impacts form stormwater. (C6)
- Clark County continues to monitor receiving waters as a basis to assess overall program effectiveness. We believe status and trend monitoring is a reasonable activity, but recognize it is also a regional responsibility to be undertaken by Ecology and regional entities such as the Lower Columbia Fish Recovery Board. (P5)
- Permittees should be allowed the option to conduct receiving water monitoring. (P5)
- The cost for the proposed year-round stormwater monitoring would cover a fairly elaborate receiving water monitoring program. (P5)

Response to the range of comments:

Develop a collaborative monitoring program

- 12 comment letters supported the formation of some type of coordinated, collaborative, regional monitoring program. Ecology agrees that a coordinated monitoring program could provide many benefits. Ecology recently initiated meetings among local, state and federal agencies and the private sector to investigate forming a monitoring group to jointly monitor urban receiving waters and aquatic habitat. Regional, coordinated monitoring programs from other states are being considered.
- In addition, Ecology has developed a proposed budget for the 2007-2009 biennium that includes a request for funding to support a consortium or other structure. If successful, a joint monitoring organization could help jurisdictions achieve all or part of the monitoring required under these permits. The permits do not preclude taking advantage of a joint monitoring organization to meet monitoring requirements, provided the deadlines in the permits can be met.

Use a collaborative monitoring process to develop different monitoring requirements

- Under EPA rules for Phase I municipal stormwater permits, monitoring is required and it is not appropriate to postpone all monitoring requirements until a joint monitoring group is formed.
- With respect to the Phase II permit, again, it is not appropriate to postpone site selection and other actions to prepare for monitoring under future permits. Ecology will determine, through information gathering and in the process of developing the next permit, what, if any, environmental effectiveness monitoring will be required in the next five-year permit cycle. If a group is formed through the current efforts, it would be well qualified to give input to the next permit process. The Phase II permits' fourth year requirement for permittees to identify priority areas for future evaluation will provide Ecology with some of the information that will be used in making that determination. Ecology will also solicit ideas about the extent to which the permit is the vehicle to collect this information; what are the most efficient methods by which this monitoring can be accomplished; and what entities are most appropriate to conduct the monitoring.

Ecology's monitoring objectives for the permits focus on monitoring the discharge regulated under the permit, answering management questions, and evaluating the effectiveness of BMPs. At this time these objectives are an appropriate first step, and are fully within the purview of the permit.

Include receiving water monitoring

- As explained in the fact sheet to the Phase I permit, Ecology has not included a requirement for receiving water monitoring for this permit term. One reason for this decision is the recognition that receiving water monitoring would benefit from a regional coordinated program, and Ecology is willing to rely on its own programs as supplemented by local government monitoring to meet this objective for this permit term.
- Ecology will reconsider the decision to require monitoring to identify the degree to which stormwater discharges are impacting selected receiving waters and sediments in future permits.

Monitoring to determine compliance with standards

- The municipal stormwater permits require a non-numeric effluent limit in the form of a SWMP in accordance with EPA's Interim Permitting approach for Water Quality-Based Effluent Limitations in Stormwater Permits, dated August 1, 1996. Monitoring for this type of limit is different than for a numeric effluent limit; compliance is based on "monitoring" completion of the actions required in the SWMP. The monitoring in special condition S8 is required to generate information necessary for feedback and adaptive management. For this permit term, Ecology has chosen to require monitoring that provides information on the degree to which stormwater discharges are contributing to water quality problems, and to assess the programs and BMPs used to control stormwater discharges.
- Section §308(a) of the Clean Water Act does not require receiving water monitoring, it requires recordkeeping, monitoring, sampling of effluents and other information as the Administrator may reasonably require to carry out the objective of this permit.

Consolidation of sites

- One commenter asked if collaboration, as allowed in the proposed permits, allows consolidation of sites and activities. The Phase I permit allows an extended deadline for an approved QAPP, if permittees collaborate. The Phase II permit allows permittees in a single urbanized area to submit a collaborative report instead of single reports. In addition, the permit allows a collaborative report by WRIA for Phase I and Western Washington Phase II permittees.
- Phase II permittees are identifying monitoring sites and management questions for future monitoring. Ecology will determine the actual monitoring requirements, and may decide to consolidate sites and actions when developing the next permit. It makes sense to have all relevant information, including the full range of possible monitoring sites and management questions, to help prepare the next permit. A collaborative report among permittees in a single urbanized area or

WRIA could identify priority areas or management issues to consider for consolidation.

- Ecology agrees to amend S8.C.2.b in the Western Washington Phase II permit to allow permittees in a single Urbanized Area or WRIA to submit a collaborative report.

RTC # 1.32 Monitoring Program Development, Deadlines and Reporting

Note: Comments on this section of the permit were considered together for both western Washington municipal stormwater NPDES permits.

Summary of issue: QAPP review. Change deadlines for the monitoring program. Change the timing of the monitoring report submittal. Amend the reporting requirements

Commenter(s): P1, P3, P4, P5, P6, P7, P9, P13, P14, W23

Permit(s) affected: Phase I; Phase II Western Washington (deadlines only)

Permit section(s): S8

Range of comments on the issue:

Monitoring program development – S8.E. (Phase I)

- There is significant concern as to whether Ecology will have the staff to review and comment on QAPPs in a timely manner to allow permittees to meet deadlines. (P3)
- Clarify in permit that all QAPPs must be reviewed and approved by Ecology prior to monitoring. (P6)
- Support having Ecology review and approve QAPPs. (P13, 14)

Monitoring program deadlines – Phase I

- Add language allowing deadlines for the monitoring program to be adjusted depending on Ecology's completion of review and commenting on QAPPs – set deadline for program development at **90 days** after Ecology approves QAPP, or X years after effective date(depending on collaborative or independent monitoring), whichever is later. (P3)
- Add language allowing deadlines for the monitoring program to be adjusted depending on Ecology's completion of review and commenting on QAPPs – set deadline for program development at **6 months** after Ecology approves QAPP, or X years after effective date (depending on collaborative or independent monitoring), whichever is later.
- Set 2 month deadline for permittee to respond to Ecology request for changes to QAPP, instead of a deadline for an approved QAPP. (P6)
- Extend the deadline for the data collection and analysis for the BMP evaluation from "4 years from the effective date" to no later than the fifth year monitoring report with a description of monitoring still in progress. The current timeline is unrealistic. For example a realistic timeline for a collaboratively developed program would be (1 year shorter overall for independent program):

End of Year 1 – Commitment to collaborative process
End of Year 2 - Submit QAPPs to Ecology
Year 3 – 3.5* – Ecology approved QAPP (* remaining timeline based on when Ecology approves QAPP)
Year 3.5 – End of Year 3 – Install and trouble shoot monitoring equipment.
Year 4 - 7.5 – Collect data. It could take up to three years to collect data for BMP monitoring. Worst case, assume 35 samples needed. At 10 storm samples/year, it would take 3.5 years
Year 7.5 – End of Year 7 – Analyze data and write report. End of Year 7 is equivalent to 4.5 years after QAPP is approved.

- Revise the deadline for the BMP evaluation to 90 days after the last laboratory data package. (P7)
- The extended deadlines for collaborative programs are too lengthy. The timelines for both collaborative and independently developed monitoring programs should be shortened. (P13, P14)
- The first stormwater monitoring reports should be submitted much sooner. (P13, P14)
- Clarify the deadline for submitting Phase II monitoring site identification, dates in table on page 4 and S8 are not consistent (W23)

Monitoring program reporting

- Include monitoring report as part of (or with) the annual report. (P1, P4, P6)
- Recommend report be submitted based on calendar year not water year, with May 1 due date for report instead of March 31. (P6)
- Recommend report be submitted based on calendar year not water year, with May 15 due date for report instead of March 31. (P7)
- Doesn't matter whether monitoring is on a water year or calendar year, but needs to be the same for all permittees. Also need 4-1/2 months to prepare the report so deadline for water year should be February 15, or for calendar year should be May 15. (P7)
- Amend monitoring report requirements as shown:

> *S8.F.b.iv. An analysis of the results of each part of the monitoring program, including any identified water quality problems or improvements in stormwater quality, (P3)*

- Abbreviated monitoring reports should be sufficient, with in depth reports when enough data is collected, or at project completion. (P4, P5)
- Another option is to submit data to a third party to analyze and report. A monitoring consortium could facilitate this. (P4)
- Move monitoring cost reporting to annual report requirements, S9, to show costs in context with other parts of program. (P6)
- Clarify that submittal of additional data as called for in S8.F.2. be associated with monitoring programs in S8.A, B, and C. Delete the language calling for a description of other stormwater monitoring programs. (P6)

- The requirement to report pollutant loads for the stormwater monitoring needs to be qualified (e.g.: what does load mean at this site?) to provide context for which the data is to be used. (P7)
- Revise to require permittees to submit analysis of data and findings relative to purpose of monitoring. (P9)

Response to the range of comments:

Monitoring program development – S8.D.

- S8.D.2 of the Phase I permit already requires Ecology review and approval of QAPPs for S8.A, stormwater monitoring, and S8.C. BMP monitoring. Ecology does not agree that QAPPs for SWMP effectiveness monitoring should be approved by Ecology, however, the permit does require submittal of these QAPPs for Ecology review.

Monitoring program deadlines:

- Agree that the timing of Ecology's review of QAPPs should not jeopardize a permittee's ability to comply with the permit. See changes made to the Phase I permit.
- Ecology's intent in requiring BMP effectiveness monitoring in the Phase I permit is to get information in time to modify the stormwater manual before the permit is reissued (if data shows an update is needed). While Ecology wants to encourage collaborative monitoring programs, it is apparent that the extended deadline for collaborative monitoring will not provide information in time to support a manual update. Ecology agrees that an additional year to develop QAPPS for a collaborative program for the monitoring required in the Phase I permit is too long and have shortened the deadline by 6 months.
- Ecology does not agree that the deadlines for the independently developed monitoring program are too long. The permit contains a single deadline for all QAPPS for the three sections of the monitoring program. This will allow permittees flexibility to submit different QAPPs (e.g. for stormwater monitoring or SWMP effectiveness monitoring) earlier than the deadline to expedite review and approval. Ecology expects it could take a year to develop the QAPPs for BMP effectiveness monitoring.
- We don't know how long (how many storms/samples) it will take to evaluate BMPs. Some may take longer than others. We also don't know how much variability in effluent will occur in different BMPs, this is another factor that can affect how long it will take to evaluate certain BMPs. For these reasons we agree that the permit cannot set an absolute deadline for submitting final reports on BMP effectiveness monitoring. The permit has been amended to add some flexibility to the completion date for the BMP monitoring.
- Ecology agrees that the deadlines for the Western Washington Phase II permit must be clarified.

Monitoring program reporting

- Ecology agrees that the monitoring report can be submitted with the annual report. As a result the monitoring report will cover monitoring in the previous calendar year instead of the water year.
- Ecology does not agree with the proposed change to S8.F.b.iv. It is appropriate to report trends, if trends have been measured. Also, the SWMP monitoring may include sampling receiving waters, depending on the management issue under consideration, and this data must be reported.
- The collaborative monitoring program option described under S8.D already allows a third party to analyze and report the data.
- Ecology has not agreed with the comment to delete the Stormwater Monitoring, and has not deleted the reporting requirements for this section. See the response to comments on the purpose of the monitoring program.
- Ecology agrees with the comment calling for clarifying that the submittal of additional data in S8.F.2. be associated with the monitoring programs in S8.A., B. and C. (Phase I permit)
- Ecology does not agree with deleting the requirement to submit a description of other stormwater monitoring. It is appropriate that Ecology be aware of other stormwater monitoring efforts conducted by permittees. The permit does not require submittal of data, only a description of the project. Ecology may request data if more information is needed.
- Ecology agrees that the reporting of pollutant loads may be qualified, if the permittee has information to limit or clarify the data. However, a permit change is not needed, as the reporting requirements do not restrict the permittees' ability to provide this information if is appropriate.
- Ecology agrees that the reporting on stormwater monitoring should include information relative to the purpose of the monitoring, specifically information on changes overtime. Ecology does not agree that permittees should report on what pollutant loading and concentrations are projected to occur from various land uses/ land covers throughout a permittees system. The data from a single site is not adequate to generalize across all areas of the same land use across a jurisdiction. Ecology will be looking at generalizing the data across different jurisdictions, but recognizes there are limitations to doing this type of analysis.

RTC # 1.33 Phase I Monitoring Costs

Summary of issue: What are the estimated costs for the monitoring requirements for Phase I jurisdictions during this permit term? Should the monitoring program be scaled back because of those costs?
Commenter(s): P1, P3, P4, P6, P7
Permit(s) affected: Phase I permit
Permit section(s): S8.A., B., C., and F.1.d
The draft Phase I permit requires:

S8.A. Stormwater discharge quality monitoring
S8.B. Stormwater Management Program Effectiveness Monitoring
S8.C. Stormwater Treatment and Hydrologic Management BMP Evaluation Monitoring

S8.F.1.d. permittees to "report the cost of development and implementation of the monitoring program including the preparation of monitoring plans, sample collection, sampling equipment, laboratory analysis, data analysis and reporting."

Range of comments on the issue:

Monitoring Costs

- S8.A. will cost $1 million for the permit term. The Thea Foss Source Control Program will satisfy S8.B. and will cost $1.3 million for the permit term. BMP Evaluation Monitoring (S8.C) will cost $1.8 million, but will not provide information useful for improving water quality, and therefore is not justifiable to rate payers. The outfall and BMP monitoring will divert funds from programs that reduce pollution. The additional monitoring will cost cause a 5% raise in utility rates. (Tacoma)
- The cost of S8.A would be nearly $300,000/yr to King Co., but won't likely provide information to answer whether and why stormwater discharges are improving or not. Trends monitoring should not be a permit requirement since stormwater is one of many factors affecting water quality. (King County)
- Every dollar taken from the stormwater program to perform monitoring is a dollar taken away from making the program more effective (Pierce County)

Summary of Monitoring Cost Estimates for the 5-year permit term:

	Stormwater (S8A)	SWMP Effectiveness (S8B)	BMP Evaluation	Total
Seattle, Alt. 1	$ 772,500	$ 484,000	$ 1,367,500	$ 2,624,000
Seattle, Alt. 2	$ 960,000	$ 653,200	$ 1,858,600	$ 3,471,800
Tacoma	$ 1,008,000	$ 1,372,200	$ 1,797,000	$ 4,177,700
Pierce County	$ 1,328,000		$ 749,000	
King County	$ 300,000			

Scope of Pollutants Monitored (which affects costs) (also covered under "Phase I Sampling Requirements" section):

- Pollutants parameters monitored under Section A, stormwater monitoring, should be reduced to a few representative parameters that can be related to required permit actions; or, related to treatment BMP selection. These include: TSS, TPH, certain dissolved metals, and nutrients. (Snohomish Co.)
- Development of a monitoring plan to achieve the objective of monitoring loading trends should look very different than the prescriptive permit requirement. The QAPP should determine what pollutants are necessary for loading trends. The plan should start with only those pollutants necessary to determine trends, not including pollutants which probably won't exceed MRL's by a factor sufficient to determine trends. (Clark County)

Response to the range of comments:

The monitoring programs proposed in the permit will have a substantial cost. The actual costs probably lie somewhere between the cost estimates provided by three commenters (Seattle, Tacoma, and Pierce County) and the revised cost estimate by Ecology.

Ecology reviewed each of the cost estimates provided by Tacoma, Pierce County, and Seattle. For different reasons in each case, Ecology considers those estimates to be conservative (high) for the proposed monitoring programs.

Ecology's original estimates were incomplete. It did not include sufficient field staff time for sampling preparation and implementation, and did not incorporate costs for sufficient review of laboratory results and field summaries, and report preparation. After adding those costs into its estimates, Ecology's revised estimates are:

S8.A: $ 600,000
S8.C: $ 650,000

Ecology does not have first hand experience in estimating the total amount of time necessary to prepare for and interpret the results of each sampling event. Ecology increased its estimates for those activities based on information provided by the commenters.

In regard to S8.B., it is very difficult to make a cost projection. The cost will depend heavily on the permittees' choice of a problem to study. A small scope problem (e.g., one pollutant or class of pollutants in one drainage basin) would have a much smaller cost than the costs of S8.A. or C. A larger scope problem (e.g., heavy metal loading across multiple basins) would have substantially higher costs, more likely on the same scale as S8.A. or C.

None of the commenters or Ecology's cost estimates took advantage of the opportunity to use a monitoring site for more than one monitoring program. Ecology thinks there are opportunities to do so. That would bring some cost efficiencies and reduce overall costs.

The monitoring costs ($300,00 to $800,000 annually depending upon whose cost estimate is used) can also be compared relative to the 2005 reported annual costs of each the Phase I permittees current NPDES stormwater programs:

Permittee	Total Program Costs (million $)	
Seattle	$ 9.3	not including Cap. Improvement
Program &		monitoring costs
Snohomish County	$ 9.5	not including reported monitoring
Clark County	$ 11.1	not including reported monitoring
Pierce County	$ 15.1	not including reported monitoring,
		FEMA mapping, & Health
Dept.		

Tacoma	$ 23.7	not including Foss Waterway cleanup
	$ 49.7	including Foss Waterway cleanup
King County	$ 58	including Roads O&M
	$ 30	w/o Roads O&M

S9 REPORTING REQUIRMENTS

RTC # 1.40 S9 Reporting Requirements

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.
See also RTC # 1.0 Cost Tracking and Reporting
Commenter(s): C1, E3, E4, P2, P3, P4, P5, P6, P7, P9, P13, P14, P16, W3, W5, W8, W9, W14, W17, W24, W42, W50
The Range of Comments:

Annual report submittal date

- The first submittal date should follow the first full calendar year of operation of the permit. (C1, P4, P5, P13, P14, W9)
- Report deadlines do not correspond with permit timelines. (W42)
- March 31 is too early a deadline considering financial reporting is required. A May date is better. (P5, P6)
- Permittees should be required to report the first year. (P16)

Required use of report forms

- Ecology should stick to the federal requirements for reporting. (W3)
- If jurisdictions collaborate on one or more program components, do they submit a collaborative report? (W17)
- Ecology should accept electronic report submittals. (P3)
- Phase I and II permittees should use the same reporting formats. (P7, P13, P14)

What annual reports include

- It is not clear how permittees are required to deal with annexed areas. Are they subject to permit requirements, including reporting requirements immediately? (W24)
- Ecology should develop a unified approach to reporting. That information should be posted and correlated to a map that outlines drainage boundaries. (W50)
- The level of detail required to report on will be difficult to meet. (P4)
- Reporting requirements should be expanded to include known improvements or degradation to water quality, fish and wildlife habitat, and other beneficial uses. (P9)

Public access to permittee records

- This condition should require distribution of the annual report to any member of the public specifically requesting a copy. (E3)
- We are concerned that reporting any non-compliance with the schedules in the permit will invite third-party lawsuits. (E4)

Review of annual reports

- We are interested that the permit time frames are attainable and that Ecology issues us a letter of compliance upon review of our annual report. (W14, P2, P6)
- Reporting requirements should be limited to those documents Ecology will review and use to modify our program requirements. (W5, W8)

Responses to comments:

Annual report submittal date

- Ecology agrees, the first submittal date is March 2008, a little more than one year after the permits are issued. The first annual report will cover the period from the effective date of the permits (February 16, 2007 through December 31, 2007)
- Report dates will seldom correspond to permit timelines. Many items will have to be reported in the following year.
- There will be little to report on the first year and Ecology would like to give permittees time to prepare for the first annual report deadline.

Required use of report forms

- Ecology uses the federal reporting requirements as a basis for our reporting requirements.
- Collaborating jurisdictions may submit the same report so long as the respective responsible officials sign the report.
- Ecology is working toward the ability to accept electronic reports.

What annual reports include

- Jurisdictions must report on annexed areas under permit coverage. Annexed areas are not exempt from permit SWMP requirements or reporting.
- Correlating elements reported on with a map of drainage areas is also a good idea for permittees.
- Comment noted.
- Comment noted.

Public access to permittee records

- Ecology agrees that permittees should provide a copy of the annual report to any person or entity that requests one. S9.E ensures that all records related to this permit and the permittee's SWMP are available to the public.
- Through the annual report, permittees are held accountable for complying with the permit requirements.

Review of annual reports

- Ecology has typically sent a letters upon review of annual reports. The permits will be managed though the Ecology regional offices, where the decision whether to send a letter will be made.

- Ecology intends to review the reports and use the information to improve the regulation of municipal stormwater in Washington State.

RTC # 1.41 Annual Report Forms

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permit.

NOTE: See RTC 1.0 cost Tracking and Part II RTC on Eastern WA Draft Permit, Part III RTC on Phase I Draft Permit, and Part IV RTC on Phase II Western WA Draft Permit

GENERAL CONDITION REQUIRMENTS

RTC # 1.46 G3 – Notification of Spill

Commenter(s): E3, P2, P6

Range of comments on the issue:

- What is meant by "having knowledge"? How extensive it should be, or, could it be any municipal employee.
- Recommend more specificity to clarify that notification is for spills into the permittee's own MS3 and when the permittee has knowledge of the spill.
- Support the condition, which appears to be more stringent than the timeframes in S5.B.3.c.iii for responding to illicit discharges. S5.B.3.c.iii should be tightened to mirror this condition.

Response to the range of comments:

Note: see also RTC #30 S5.B.3 IDDE

- Knowledge of spill can be any information that may lead one to believe that certain spills has taken place at a certain location or locations. Responsible officials of the municipality trusted with stormwater management program through the chain of command are responsible to report all such incidents to Ecology. All spills must be reported to Ecology.

RTC # 1.47 G4 – Bypass Prohibited

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): P3, P13, P14, W13, W14, W17, W30, W40

Range of comments on the issue:

- Disagreement with the statement that "severe property damage does not mean economic loss."
- The general conditions used in this permit appear to be from individual sewerage treatment discharge permit and need to be modified to be more appropriate for municipal stormwater general permit.
- Specifying certain reporting requirements for anticipated and unanticipated discharges must be included into the permit as required under federal law.

Response to the range of comments:

- The general conditions used in this general permit and general and individual permits are based on reporting requirements as prescribed under 40 CFR 122.41.

- Severe property damage does not always amount to economic loss but it can. If property damage interrupts cash flow of a municipality, it may amount to economic loss.

RTC # 1.48 G5 – Right of Entry

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): P2, P3, W13, W17, W42

Range of comments on the issue:

- Certain files with attorney client privilege must not be disclosed. Also, King county would like specificity on right of entry to one's own facility and be in compliance with state disclosure laws.
- Specifically insert new language to insure that right of entry and copying of documents are in compliance with the state disclosure laws.
- G5 must define reasonable time.

Response to the range of comments:

- This right of entry applies to sites that are owned or operated by the Permittee. The documents required to be kept for this permit are public records. "Reasonable time" means normal business hours.

RTC # 1.49 G6 – Duty to Mitigate

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E3, P2, W17

Range of comments on the issue:

- The language is too vague and, as a result, one cannot assert whether permit compliance constitutes compliance with this condition.
- This permit does not appear to specifically require measures to reverse violations of WQS. Does this section purport to require a Permittee to take action to avoid WQS violations?

Response to the range of comments:

- This permit does not authorizes any discharge in violation WAC 173-201A, Water Quality Standards (WQS). WQS violators must employ all available means to achieve compliance in shortest reasonable time. This is a required element of 40 CFR 122.41(d).

RTC # 1.50 G7 – Property Rights

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): P3

Range of comments on the issue:

- The language needs to be modified to be more specific about entering private property.
- The language of G7 should read as "…any sort or the right to enter private property".

Response to the range of comments:

- The original language of G7 is taken from the code of federal regulations, 40 CFR 122.41(g). This permit cannot and does not grant any new authority, or restrict any prior authority of local governments to access private property.

RTC # 1.51 G9 – Monitoring

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E5, E16, E21, P2, P3, P5, P6, P7, P13, P14, W13, W14, W17, W42

Range of comments on the issue:

- This section is inappropriate since it is taken from wastewater treatment plant permits. In the case of a municipal stormwater permit, where active monitoring for compliance is not required in any parts of this permit, it seems unnecessary. This section seems unnecessary and Ecology must modify the permit to require monitoring, or must follow state rule making process for such requirements. It may be more appropriate to include this section as part of QAPP. This section must be written to seek compliance with 40 CFR 136 and must not be used to modify the permit informally.
- The permit must not seek record retention of five years. The state and federal record retention is for three years.
- Add a note stating that this section is applicable only where analytical monitoring is required. Monitoring is not required during this permit term.
- Delete this section. Monitoring is not required in this permit term.

Response to the range of comments:

- The term of the permit is for five years. Therefore, it is reasonable to ask permittees to retain the records for at least five years to correspond with the terms of the permit.
- This requirement is applicable to any monitoring required under S7 and S8.
- This is a standard and general language that can be used under various situations and for various permits, standard sewage treatment plant, or municipal stormwater facility. Although this permit does not actively seek monitoring for water quality compliance, there may still be occasions when such activity may become necessary. It is clear where this language applies and where it does not apply.

RTC # 1.52 G10 moved Substances

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): P6, P7

Range of comments on the issue:

- Commenters disagree that permittees need to follow the guidelines in the Phase I Permit Appendix 6. They believe the appendix must be used as an alternative for disposal practices. Unless these guidelines have gone through rulemaking process the usage must not be mandatory.

Response to the range of comments:

- RCW 90.48 prohibits re-suspension of removed substances. Street waste liquid is not a stormwater discharge. The Clean Water Act contains general prohibitions

that prohibit discharge of non-stormwater to MS4s. The guideline for management of Street wastes as presented, i.e., appendix 5 of the Phase II (E&W) and Appendix 6 of Phase I, is taken from the Western Washington Stormwater Manual, volume IV, Appendix G, Recommendations.

RTC # 1.53 G12 – Revocation of Coverage

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E3, P2, P3, W17, W30, W40, W42

Range of comments on the issue:

- Interested parties should not have right, or privilege to seek coverage revocation for any city; therefore, it must be deleted from the permit. Also, cities must have a chance to defend themselves against any such arguments.
- How does Ecology define "contributes significantly to WQS violations"?
- Interested parties should not have right, or privilege to seek coverage revocation. The language is too broad and not specific enough to call for revocations by interested parties.

Response to the range of comments:

Chapter 43.21 B RCW and Chapter 173-226 WAC clearly describes ways by which the Director may exercise his authority to terminate coverage. Permit coverage revocation is generally reserved as an action to take only after exhausting all other options to compel a non-complying Permittee to comply. Interested parties can petition for revocation of permit coverage, but the decision is left to Ecology and is made by the Director.

RTC # 1.54 G13 – Transfer of Coverage

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): P2

Range of comments on the issue:

- Trigger by which transfer of coverage may be possible should be explained more clearly in the permit.

Response to the range of comments:

- Ecology may consider various factors related to environmental conditions and water quality impacts prior to making such decision. Such decisions are highly fact-specific, and Ecology's decision to require an individual permit may be appealed by any party.

RTC # 1.55 G14 – General Permit Modification and Revocation

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E3, P2, P3, P7, P13, P14, W13, W17, W30, W40, W42

Range of comments on the issue:

- Why does approval of water quality management plan triggers modification and/or revocation, or, why does additional information indicating unacceptable cumulative effect trigger possible modification and and/or revocation of the permit? What is meant by cumulative effects?

- Information obtained needs be by the permittee. Ecology must define cumulative effects. Few cities believe the information on site specific issues must be supplied by the permittee.
- This condition should include language that authorizes revocation, modification, and requires reporting for "a violation of any term or condition of this General Permit."

Response to the range of comments:

- It is required by 40 CFR 122.41(f) to state that the referenced permit actions are allowed "for cause." This condition defines some of the conditions under which Ecology may find cause for a permit action.
- This condition was developed in accordance with 40 CFR 122.62, 40 CFR 124.5, WAC 173-220 and WAC 173-226. Appropriate actions for non-compliance are included in conditions G20, S4.F, and other permit sections and do not need to be added here.

RTC # 1.56 G15 – Reporting a Cause for Modification or Revocation

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E3, P6

Range of comments on the issue:

- The following language must be added to section G15 as sentence prior to last sentence. "All such reports shall be made in the annual report, unless otherwise directed by Ecology."
- This condition should include language that authorizes revocation, modification, and requires reporting for a violation of any term or condition of this General Permit.

Response to the range of comments:

- It is inappropriate and not in the state's broader interest to limit Ecology's ability to receive such valuable information from permittee to just one annual report per year. Ecology can and should exercise its right to permit modification or revocation at any time during the term of this permit. Appropriate actions for non-compliance are included in conditions G20, S4.F, and other permit sections and do not need to be added here.

RTC # 1.57 G16 – Appeals

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): P2, P3

Range of comments on the issue:

- What is the legal authority cited by the State for limiting the legal effect of an appeal to the individual discharger?

Response to the range of comments:

- Ecology's legal authority is based on Chapter 43.21B RCW and WAC 173-226-190.

RTC # 1.58 G20 – Non-Compliance Notification

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): P3, P6, also related to comments received on section S4 Compliance with Standards.

Range of comments on the issue:

- This section should not be included.
- The section was not discussed during first round of public comment.
- Recommend a simpler version of the language that does not necessitate reporting noncompliance to the Department.
- This section is necessary to achieve compliance with standards.

Response to the range of comments:

- Having this language in the permit is necessary to insure non-compliances are properly reported to Ecology and appropriate actions are being taken by the permittees to eliminate such non-compliances. These requirements are consistent with the federally mandated reporting requirements at 40 CFR 122.41(l).

RTC # 1.59 G21 – Upsets

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): P6

Range of comments on the issue:

- This new section was recommended by the City of Seattle. Permittees are entitled to an upset defense, described in federal law and important this permit term considering the increasing role of complex, technology based BMPs.

Response to the range of comments:

- In case of upsets, if the Permittee can show through appropriate operational logs, maintenance records and other documentations that an incident was truly beyond its ability to control; Ecology can and may exercise its discretion prior to initiating enforcement. The new condition will be included as it was written in the federal regulations.

DEFINITIONS

RTC # 1.60 Definitions

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E3, E9, E11, E16, P3, P6, W2, W3, W4, W5, W7, W8, W13, W14, W16, W17, W23, W24, W46

Range of comments:

- AKART does not refer to Chapter 90.48.520 RCW.
- Define or amend the following terms:
  - "Commercial land use" need be defined for the purpose of S8.a.
  - "Discharge" for the purpose of this permit must be defined as discharges to or from municipal separate storm sewers…
  - "Beneficial Uses', "DIP", "High Density residential land use", "Industrial Land Use", "TMDL"
  - "Integrated Pest Management (IPM)" need to cite RCW 17.15.010 instead

- "Low Density Residential land use" should be defined for the purpose of S8.A
- "Maintenance" - use recommended language to define maintenance
- "Runoff" and "Stormwater" (recommended language to be added to the definition for consistency)
- "Applicable TMDL" – request its deletion.
  "Co-permittee" – needs be changed to refer to any permittee who co-applied with the permittee to receive a NPDES permit with limited condition.
- "Heavy equipment maintenance Yard" - minor recommended editorial changes.
- "Illicit Connection" – minor changes of the language for clarity
- "Illicit Discharge" – minor changes of the language for clarity
- "Large MS4" – recommend minor changes of the language for clarity
- "Major Outfall" – recommend minor changes
- "Maximum Extent Practicable (MEP)" – recommend minor changes
- "Medium MS4" - minor changes of the language for clarity.
- "Certified Professional in Erosion and Sediment Control Program" - Add option of being certified through CPESC. WWW.cpesc.net.
- "New development and land-disturbing activities" - Needs an exemption from the definitions for environmental restoration activities and projects. Provide the same exemptions as the installation of underground utilities.
- "Unfenced fire lanes as PGIS – Delete fire lanes from PGIS definition; by including fire lane as a PGIS, applicants will want to fence and barricade them; interfering with their use in emergencies. They receive very little use except in emergencies.
- "Project Sites and Sites" – The words are so similar that it can become confusing.
- "Threshold Discharge Area" – does it pertain to sites, or project sites.
- "Established Construction Access" – Ingress and egress routes need appropriate BMP to avoid tracking mud and dirt out on the traveled right-of-way.
- "Stabilized Soils" – suggesting some wording like when there is likelihood of measurable precipitation (0.1 inch or more), disturbed soils and stockpiles shall be protected from erosion.
- "Protected Slopes" – Change wording to "Excavated material should be placed on the uphill slope…." Trench safety should be primary concern and adding fill to the upslope side of a trench increases hazard to workers in the trench.
- "Previously Developed Site" Add new definition under Appendix I to mean as the condition that existed upon the date of adoption of the Permit;
- "Undeveloped Sites" Add new definition under Appendix I to mean condition of the site prior to artificial human activity such as logging, mining, clearing and etc…, which changes retentive capabilities of the site to absorb, detain, or transport stormwater.
- Revise the "exempt road maintenance activities" for specificity and clarity.

- "Qualified Personnel" is vaguely defined.
- Relationship of CSO and MS4 need be further clarified.
- Redefine MS4 and small MS4 to exclude other wastes. MS4, large or small, is to transport stormwater only.
- Clarify what portion of the Western Washington Stormwater Manual is mandatory.
- "Equivalent document" need be clarified.
- Exclude Roads and municipal streets from the definition of MS4.
- How does Ecology define "contributes significantly to WQS violations"?
- How does Ecology identify whether a MS4 is a "cause of impairment"?
- What are "post-construction controls"? Ecology does not define this phrase, nor does it indicate what type of requirements and/or restrictions in intends by this phrase. The only post-construction controls alluded to in S5.B.5 are "adequate ongoing long-term operations and maintenance of the BMPs approved by the Permittee" and post-construction inspections.
- "Sensitive waters" are described in the NPDES Phase II Designation Criteria Proposed Draft dated 7/24/04 but not defined in the glossary. A definition is needed to determine whether the criteria apply to an MS4.
- In Fact Sheet section on S2.A.3: define underground waters

Response to comments:

- Chapter 90.48.520 RCW does refer to AKART.
- The permit has adequate definitions for most of the terms requested. The following definitions need to be added or clarified:
  - "Low Density Residential Land Use", for the purpose of section S8, will be defined as one unit per 1-5 acres.
  - Other land uses must be defined by local ordinances.
  - "DIP" means detailed implementation plan, as defined by an approved TMDL. This acronym should be replaced with "TMDL implementation plan".
  - "Maintenance" is a commonly used term and the dictionary definition is sufficient for this permit.
  - The unfenced fire lanes are considered PGIS since they are subject to vehicular traffic and are used similarly to other roads.
  - The terms project sites and sites are two separate terminology used by Ecology to differentiate between physical boundaries of the site and the disturbed areas of the site.
  - Threshold Discharge Area pertains to project sites in Western Washington.
  - The definition of MS4 does not include CSOs. CSOs are not covered under this permit.
  - Roads and municipal streets that are connected via trenches and ditches are part of MS4 system as defined by 40 CFR 122.6B8 and 16.
  - This permit is concerned with the discharges from municipal separate storm sewers.
  - The permit does not provide any exemptions for environmental restoration of new development and land-disturbing activities and for underground utilities.

- It is duty of the project owner/or contractor to provide appropriate treatment system for wheel wash to prevent mud track out for either ingress, or egress.
- Unless vegetation is well established, the soils must be covered and protected from erosion irrespective of size of the storm. Soils must be covered in advance of knowledge of the size of a storm.
- It is duty of project owner to exercise cautious when handling excavated materials. Trench Safety concerns must be discussed with Labor and Industry, outside the scope of this permit.
- Large MS4 and small MS4s, are not designed to transport non-stormwater wastes such as solids, oil, grease and dirt; however, the permit is concerned with non-stormwater wastes that may be present in storm sewerage system and must be prevented.
- Contributing significantly to WQS violations means causing exceedances of water quality criteria. Causes of impairment are determined on a case-by-case basis, usually through the process of developing a TMDL or other water-quality clean-up plan. Outfall sampling and receiving water monitoring may identify MS4 contribution and possible causes of receiving water impairment.
- "Significant contributor" was defined in the draft permit as "a discharge [that] contributes a loading of pollutants considered to be sufficient to cause or exacerbate the deterioration of receiving water quality or instream habitat conditions."
- "Post-construction controls" are the permanent BMPs implemented to control stormwater pollution and flows from a new development or redevelopment site.
- "Sensitive waters" is defined in the document that describes the factors Ecology will consider in evaluating new areas for coverage under the permit. The definition is:

  "Sensitive waters" include public drinking water intakes and their designated protection areas; designated public swimming areas; shellfish beds; State-designated Outstanding Resource Waters; National Marine Sanctuaries; State Aquatic Reserves; and waters determined to be critical habitat for threatened or endangered species.

  The term is not used in the permit and is not needed in the Definitions and Acronyms section.
- The term "ground water" should replace "underground water" and will be defined.

PHASE I AND WESTERN WA PHASE II APPENDIX I

RTC # 1.61 General Comments on Appendix 1:

Note: Comments on this section of the permit were considered together for both western Washington municipal stormwater NPDES permits.

Summary of issue: Comments on Appendix 1 of the Phase I Municipal Stormwater Permit and Appendix 1 of the Western Washington Phase II municipal Stormwater Permit
Commenter(s): P3, P5, W3, W4, W7, W14, W23, W24, W45, W46, W50
Permit(s) affected: Phase I Permit
Western Washington Phase II Permit
Permit section(s): Appendix 1 of both Permits
See also response to comments for:
Stormwater Site Plans and Stormwater Pollution Prevention Plans
Certified Erosion and Sediment Control Lead
Flow control for redevelopment projects
Range of comments on the issue:

- At numerous locations throughout Appendix 1 there are references to "the manual". The appendix should be clear which manual is being referred to. Please clarify what SWMMWW refers to. Please clarify what document contains Appendix I-E – Flow control … (W14, W23, W46, P3, P5)
- Every reference to the Stormwater Management Manual for Western Washington (SMMWW) should include an entry indicating that the Permittee is allowed to use relevant sections from an equivalent document, or establish a program that is equal to or as restrictive as the referenced section. Every reference to the SMMWW should also state that only the required portions of the referenced sections are mandated and that the recommended sections are not. (P3)
- Include WSDOT manual as minimum requirements for County Road Projects. (P5)

Response to the range of comments:

- Ecology agrees references to "the manual" are vague. The appendix has been modified to include the entire title of the *Stormwater Management Manual for Western Washington* (2005). Where appropriate, references to specific chapters and volumes of the *Stormwater Management Manual for Western Washington* have been inserted.
- There are many references to parts of the *Stormwater Management Manual for Western Washington* in the appendix. In some cases the use of equivalent documents or manuals is appropriate. In other cases, the use of the specific referenced section of the *Stormwater Management Manual for Western Washington* is required. The Appendix notes where other equivalent documents or manuals are allowed.
- The WSDOT highway runoff manual is not currently approved as being equivalent to the *Stormwater Management Manual for Western Washington*. Ecology has issued a partial approval of the WSDOT highway runoff manual and is working with WSDOT to bring the WSDOT manual into equivalency with the 2005 *Stormwater Management Manual for Western Washington*.

RTC # 1.62 Exemptions:

Note: Comments on this section of the permit were considered together for both western Washington municipal stormwater NPDES permits.
Commenter(s): W7, W23, W24, W50

Range of comments on the issue:

- Appendix 1, page 2 – many existing roadways consist of aged chip seal over an existing asphalt roadway. It is common practice to maintain these roads by installing an asphalt overlay. As written the permit would treat this surface as a new impervious surface. The permit should be clarified to state that overlaying chip seal only where there is not an under laying impervious surface would constituent a new impervious surface. (W7)
- Pg. 2. The requirement to treat the conversion of graveled areas to asphalt regarded as "new construction" seems to contradict the previous 1992 Ecology stormwater manual that regarded the conversion from gravel to asphalt/concrete a BMP for erosion and sediment control. The conversion will not create more impervious area, for the gravel bed is typically compacted and considered impervious already. This activity should be placed in the category of "existing" infrastructure where a stormwater retrofit could be completed during the conversion from gravel to asphalt/concrete. (W50)
- Road Maintenance – Third Bullet (Page 2): Except for upgrading from dirt, all other existing surfaces are already impervious by definition. Therefore, except for upgrading from dirt, these upgrades should be defined to be replaced impervious surfaces. (W24)
- Recommend the exemptions for road maintenance listed in Appendix 1 of the Eastern Washington Phase II permit (W23)
- Road Maintenance – First Paragraph (Page 1)**:** Revise this paragraph as follows modify the exempt road maintenance activities to include additional activities appropriate for exemption from this Appendix:

  "The following road maintenance practices are exempt: pothole and ~~square~~ rectangular cut patching that is less than the full width of the roadway, overlaying existing asphalt or concrete pavement with asphalt, ~~or~~ concrete, or a bituminous surface treatment (e.g. chip seal or slurry seal), without expanding the area of coverage, shoulder grading, reshaping/regrading drainage systems, crack sealing, resurfacing with in-kind material without expanding the road prism, and vegetation maintenance." (W24)
- Road Maintenance (Pages 1 and 2): The term "road prism" needs to be defined. (W24

Response to the range of comments:

- Resurfacing roads by upgrading from dirt to; gravel, asphalt, or concrete; upgrading from gravel to; asphalt, or concrete; or upgrading from a bituminous surface treatment ("chip seal") to; asphalt or concrete are considered new impervious surfaces since the upgrade represents an increase in capacity for the road.

RTC # 1.63 Definitions:

Note: Comments on this section of the permit were considered together for both western Washington municipal stormwater NPDES permits.

Commenter(s): W3, W7, W23

Range of comments on the issue:

- Appendix 1, page 3 – The permit is inconsistent, treating gravel roads and packed earthen roads as impervious surfaces (correctly so) but classifying the paving of gravel shoulders as the creation of new impervious surface. Treating the paving of gravel shoulders as new impervious surfaces means that water quality and flow control would now be required for these projects. This will inhibit local governments ability to carry out these important safety projects and is counter to the development of non-motorized transportation opportunities such as bicycle lanes. (W7, W23)
- Page 3 New Development and Land Disturbing Activities: Need an exemption from the definitions for environmental restoration activities and projects. Provide the same exemption as the installation of underground utilities. (W3)
- Page 4 Defining Unfenced Fire Lanes as PGIS: Delete fire lanes from PGIS definition; by including fire lanes as a PGIS, applicants will want to fence and barricade them; interfering with their use in emergencies. They receive very little use except in emergencies. (W3)
- Page 4-5 Definition of "Project Site" and "Site:" The words are so similar that it can become confusing. Also see "Threshold Discharge Area definition: "…onsite area…. Does this pertain only to the "project site" or the "site?" (W3)

Response to the range of comments:

- Paving gravel shoulders is considered creating new impervious surfaces and as pointed out by the commenter if the thresholds are triggered water quality treatment and/or flow control would be required.
- Environmental restoration activities generally will not add new impervious surfaces and therefore the only construction stormwater pollution prevention (minimum requirement #2) would apply.
- Unfenced fire lanes are not considered pollution generating impervious surfaces provided they are not subject to regular vehicle use. If fire lanes are used regularly by vehicles then they are considered to be a pollution generating impervious surface.
- Project site is the area of the parcel that is influenced by new development of re-development. The site is the legal boundaries of the parcel. The project site may be part or all of the site/parcel. The threshold discharge area definition applies to the project site.

RTC # 1.64 Applicability of the Minimum Requirements:

Note: Comments on this section of the permit were considered together for both western Washington municipal stormwater NPDES permits.

Commenter(s): P17, W4, W7, W24

Range of comments on the issue:

- Appendix 1, page 7-8 – Flow charts should include the 1 acre regulatory threshold in the phase II permit. (W7)
- The applicability standards of Appendix 1, 2.4, including the flow charts are complex and confusing. (W4, P17)
- There is a distinct lack of incentives for developing small sites in the permit. The permit should provide incentives such as waivers or exemptions for building on smaller lots, and for urban infill. (W4)

- Common Development Plan or Sale (Pages 1 and 17): Reference is made to application of these requirements to projects less than 1 acre in size that are part of a larger common plan of the development or sale. Under state law, Permittees cannot require development controls or mitigation for a specific project when those controls or mitigations are based on speculation of future projects. Permittees can impose such requirements when there is a larger common development plan, but the mere fact of common ownership or the sale or purchase of land does not allow Permittees to impose these regulations on a currently proposed project. Delete the words "or sale" from all provisions in this Appendix. (W24)

Response to the range of comments:

- The 1 acre regulatory threshold has been added to the flow charts for the phase II permit.
- Comment noted. The minimum requirements and flow charts are complex. Suggestions for more clearly outlining the minimum requirements are welcome.
- The permit does include reduced requirements for small projects. In part this is why the minimum requirements are flow charts are so complex.
- The reference to a common plan of development or sale is from the EPA phase II rules. EPA phase II rules require the application of stormwater controls for new development or re-development projects which disturb greater than or equal to 1 acre, including projects less than one acre that are part of a larger common plan of development or sale.

RTC # 1.65 Minimum Requirement #1:

No comments received.

RTC # 1.66 Minimum Requirement #2:

Note: Comments on this section of the permit were considered together for both western Washington municipal stormwater NPDES permits.

Commenter(s): P17, W3, W4, W24

Range of comments on the issue:

- Minimum Requirement #2 – Title (Page 10): The title is missing the word "Plan", and should read as follows: "Minimum Requirement #2: Construction Stormwater Pollution Prevention Plan (SWPPP)" (W24)
- Page 12 Establish Construction Access: a. "access limited to one route" - say ingress and egress routes need appropriate BMP to avoid tracking mud and dirt out on to the traveled right-of-way. (W3)
- Page 13, 5. Stabilize Soils: d. suggest considering some wording like "when there is the likelihood of measurable precipitation (0.1 inch or more), disturbed soils and stockpiles shall be protected from erosion." (W3)
- Page 14, 6. Protected Slopes: d. Change wording to "Excavated material should be placed on the uphill slope…" Trench safety should be primary concern and adding fill to the upslope side of a trench increases hazard to workers in the trench. (W3)

- What type of inspection is referred to in Appendix 1, 2.5, #2, 13 ("Based on the results of the inspection…)? Is this an inspection by local government staff or by the construction site operator? (W4, P17)
- The seasonal work limitations are confusing, and are not necessary. (W4, P17)
- Exposed soil requirements are costly and not necessary. Provisions to cover exposed soils should be an optional BMP. (W4, P17)
- Unlike both the Western and Eastern Washington phase II permits, the phase I permit does not include the option for phase I jurisdictions to offer the erosivity waiver. (P17

Response to the range of comments:

- "plan" has been added to the title of Minimum Requirement #2.
- Construction access should be limited to one route if possible. If multiple ingress and egress routes are used they all must have appropriate BMPs in place to prevent tracking of soils off the site.
- The permit requires the Permittees to include in their ordinance requirements for soil stabilization. The permit contains the necessary flexibility to allow local governments to incorporate a more specific trigger such as a predicted rainfall event.
- The permit does not require excavated soils be placed upslope of the trench if doing so would compromise worker safety.
- The inspection referred to is the inspection by the construction site operator.
- The permit does not establish seasonal work limitations. The permit does require local governments adopt requirements for stabilizing soils.
- Covering exposed soils is one of several BMPs that can be used to stabilize exposed soils.
- The erosivity waiver is not included in the phase I permit because the 1995 phase I permit did not include a erosivity waiver. Including the waiver now in the phase I permit would constitute backsliding and is prohibited under the federal Clean Water Act.

RTC # 1.67 Minimum Requirement #3:

No comments received.

RTC # 1.68 Minimum Requirement #4:

Note: Comments on this section of the permit were considered together for both western Washington municipal stormwater NPDES permits.

Commenter(s): W23

Range of comments on the issue:

- Minimum Requirement # 4, not all outfalls require energy dissipation. Strike the statement "All outfalls require energy dissipation." (W23)

Response to the range of comments:

- Ecology agrees not all outfalls require elaborate energy dissipation structures. All outfalls should be assessed and energy dissipation appropriate for the unique characteristics of the outfall must be employed.

RTC # 1.69 Minimum Requirement #5:

Commenter(s): P17, W4

Range of comments on the issue:

- Almost all residential development will be required to comply with Minimum Requirement #5 and the costly and complex roof downspout control BMPs and dispersion and soil quality BMPs contained in the Western Washington Stormwater Manual. (W4, P17)

Response to the range of comments:

- Comment noted. Ecology disagrees that roof downspout control BMPs and dispersion BMPs are necessarily costly. In fact these BMPs are considerably less costly and simpler to employ compared to other flow control and treatment BMPs.

RTC # 1.70 Minimum Requirement #6:

Note: Comments on this section of the permit were considered together for both western Washington municipal stormwater NPDES.

Commenter(s): P6, W46

Range of comments on the issue:

- Appendix 1, Page 20: Minimum Requirement #6 (Runoff Treatment) should be changed to read as follows:
  - Projects in which the total of *new* effective, pollution-generating impervious surface (PGIS) is 5,000 square feet or more in a threshold discharge area of the project, or
  - Projects in which the total of *new* pollution-generating pervious surfaces (PGPS) is three-quarters (3/4) of an acre or more….

  NOTE: The requirement as stated is independent of a threshold. This change makes the text consistent with Figure 2.2 Flow Chart. (W46, P6)

Response to the range of comments:

- The commenter is incorrect. Runoff treatment is required for additions of new or replaced impervious surfaces. The requirements outlined above must be interpreted along with figure 2.2 (re-numbered figure 3.3 in the final permit).

RTC # 1.71 Minimum Requirement #7:

Note: Comments on this section of the permit were considered together for both western Washington municipal stormwater NPDES.

Commenter(s): W14

Range of comments on the issue:

- Page 23, third bullet – this requirement will capture many projects falling below the 10,000 sq. ft. threshold. Is this Ecology's intent? (W14)

Response to the range of comments:

- Projects which cause a 0.1 cubic feet per second increase in the 100-year flow frequency from a threshold discharge area are required to employ flow control, even if the effective impervious surfaces is less than 10,000 square feet..

RTC # 1.72 Minimum Requirement #8:

Note: Comments on this section of the permit were considered together for both western Washington municipal stormwater NPDES permits.

Commenter(s): W14

Range of comments on the issue:

- Page 25, Applicability – we believe this language is overly broad for two reasons: 1) the use of the word "indirectly" without a qualifier such as distance make the requirements applicable to all projects whose stormwater eventually makes its way to a wetland, and 2) the permit does not include a definition of 'wetland' and does not distinguish between regulated and unregulated wetlands. (W14)

Response to the range of comments:

- The objective of the wetlands protection minimum requirement is to protect the functions and values of existing wetlands by maintaining existing hydrology. Projects can discharge indirectly to a wetland and still have an adverse impact on hydrology of the wetland. For this reason Permittees are required to assess the potential impacts of development projects on down stream wetlands. The definition for wetland from the Stormwater Management Manual for Western Washington has been added to the definitions section of this Appendix.

RTC # 1.73 Minimum Requirement #9:

No comments received.

RTC # 1.74 Minimum Requirement #10:

Note: Comments on this section of the permit were considered together for both western Washington municipal stormwater NPDES permits.

Commenter(s): P13, P14, P17, W4

Range of comments on the issue:

- Basin or watershed plans add another burdensome and conflicting layer of regulations. (W4, P17)
- Language allowing tailoring of requirements through use of basin plans should be strengthened to *require* more stringent requirements as necessary to ensure compliance with water quality standards. Salmon recovery plans should be allowed planning effort. Tailored requirements should be required to provide *superior* protection and levels of pollution control. (P13, P14)

Response to the range of comments:

- See also RTC for Basin Planning
- Basin or watershed plans are not required by this permit. Basin plans are optional and may be used by the permittee to modify or tailor the minimum requirements to a specific basin or watershed.
- Salmon recovery plans are an important element of salmon recovery but are not required by these permits. Generally the level of site specific detail in salmon recovery plans is not sufficient to substitute for the requirements outlined in these permits. Ecology views these permits and salmon recovery plans as being complementary.

RTC # 1.75 Adjustments, Exceptions and Variances:

Note: Comments on this section of the permit were considered together for both western Washington municipal stormwater NPDES permits.

Commenter(s): P6, W46

Range of comments on the issue:

- Appendix 1, Page 29-20: In this section, Ecology is setting forth required wording for "Adjustments" and "Exceptions/Variances." Different jurisdictions define these three items differently, combine them into a single category called Exceptions. Recommend Ecology include alternative language for exceptions, variances and adjustments such as: (W46, P6)

EXCEPTIONS, VARIANCES, AND ADJUSTMENTS TO REQUIREMENTS

A. General. Requests for exceptions to the requirements shall include alternative requirements, waivers, variances, reductions, adjustments, or modifications of the
requirements. An exception shall only be granted to the extent necessary to meet the criteria set forth below. An applicant is not entitled to an exception, whether or not the criteria allowing approval of an exception are met. The Permittee may require an applicant to submit an engineer's report or analysis with a request for an exception. When an exception is granted, the Permittee may impose new or additional requirements to offset or mitigate harm that may be caused by granting the exception, or that would have been prevented if the exception had not been granted.

B. Equally Protective Exceptions. The Permittee may approve a request for an exception if the Permittee determines that it is likely to be equally protective of public health, safety and welfare, the environment, and public and private property as the requirement from which an exception is sought.

C. Other Exceptions. The Permittee may approve a requested exception even if it is not equally protective of public health, safety and welfare, the environment, and public and private property, or if the Permittee cannot determine whether it is equally protective, if the Permittee determines that substantial reasons exist for approving the requested exception.
Substantial reasons may include, but are not limited to:

- The requirement is not technically feasible;
- An emergency situation necessitates approval of the exception;
- No reasonable use of the property is possible unless the exception is approved; and
- The requirement would cause harm or a significant threat of harm to public health, safety and welfare, the environment, or public and private property, or would cause extreme financial hardship, which outweighs its benefits, and the requested exception would not cause significant harm.

> **D. Public Notice.** Public notice of an application for an exception and of the Permittee's decision on the application shall be provided."

Response to the range of comments:

- Ecology does not agree that adjustments, exceptions and variances are the same. Ecology views adjustments as a change in the minimum requirements which are supported by sound engineering practices and provides substantially equivalent environmental protection as the minimum requirements in this Appendix. Because there is little or no difference, environmentally between the adjusted minimum requirement and the minimum requirement in the Appendix there is a lower approval threshold.

  Exceptions and variances are substantive changes to the minimum requirements made in response to unique site conditions. Ecology expects exceptions and variances to be relatively unusual whereas adjustments to be more common. Including exceptions, variances and adjustments under a single heading within the permittees code is acceptable provided the code reflects these differences.

RTC # 1.76 The Erosivity Waiver:

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Should the erosivity waiver excuse the site operator from all requirements of the permit, and what is appropriate enforcement? Should the erosivity waiver be included in the Phase I permit?

Commenter(s): E4, E9, E10, P17, W4, W24, W42

Permit section(s):

- Phase I: S5.C.5 and Appendix 1, Minimum Requirement #2
- Phase II W WA: S5.C.4 and Appendix 1, Minimum Requirement #2
- Phase II E WA: S5.B.4 and Appendix 1, Core Element #2

Range of comments on the issue:

- The erosivity waiver should be included in the Phase I permit.
- Phase II E WA permit, Appendix 1, Core Element #2, provisions on p. 3 and p. 8 regarding erosivity waivers are confusing and inconsistent. One exempts projects from site plan review, the other relieves site operators of local jurisdiction SWPPP review. Please clearly state, in both sections, what exactly the site operator is expected to do.
- The requirements and purpose for the Erosivity Waiver should be the same as in the CSWGP.
- Two erosivity waivers must be submitted – one to Ecology and one to the local agency. This is a duplication of efforts and not a true exemption for dry-weather construction.
- Why doesn't the permit require local governments to give a similar exemption?
- Phase II W WA permit, S5.C.4.B.vii specifies that a project can apply for an Erosivity Waiver, and not submit a SWPPP for review, if the project is 5 acres or less, while Section S5.A.4.b specifies project sizes that disturb land 1 acre or greater. Please clarify.

- The permit indicates that an erosivity waiver at the local level only exempts the applicant from SWPPP *review*. This implies that a SWPPP must still be prepared. This undermines the intent and purpose of the waiver which is to obtain "an exclusion from NPDES stormwater permitting" and alleviate the burden on dry weather construction projects.
- The E WA Phase II permit requires escalating enforcement sanctions for construction sites that fail to meet the timeline restrictions of the Erosivity Waiver. Construction is often unavoidably delayed by unforeseen circumstances. The Construction Stormwater General Permit is fair in that it provides that if construction activity is going to extend beyond the certified waiver period for any reason, the operator has two options to correct the situation. The enforcement requirements in the E WA Phase II permit are heavy-handed.

Response to the range of comments:

- Ecology decided not to include the erosivity waiver in the final Phase I permit because, under the current permit issued in 1995, these jurisdictions are regulating all construction sites. To allow the erosivity waiver in the reissued permit would constitute backsliding under the federal CWA.
- The requirements on pp. 3 & 8 of Appendix 1 of the Phase II permit for E WA are the same. The Stormwater Site Plan (SSP) is a document that includes *both* a temporary Stormwater Pollution Prevention Plan (SWPPP) for the construction phase of the project, *and* plans for the permanent stormwater pollution controls for the site that will be implemented and operated following project completion and occupancy. On p. 3 the review exemption is given only for the portion of the SSP that is for the construction phase: the SWPPP.
- The erosivity waiver language in Appendix 1 of both Phase II permits is taken directly from the CSWGP. Some language changes were necessary because the "permittee" in these permits is the local jurisdiction, not the site operator, and in this situation, it is the local jurisdiction (not Ecology) that is regulating the construction site.
- These permits require permittees to regulate projects disturbing one acre or more (and smaller projects that are part of a common plan of development or sale). The erosivity waiver is only allowed for "small" projects, defined as those disturbing less than 5 acres. Permittees who choose to regulate projects disturbing less than 1 acre may also allow the erosivity waiver to be applied at those sites.
- A formal SWPPP does not need to be prepared for sites getting erosivity waivers; however, consistent with the requirements in the Construction Stormwater General Permit (CSWGP), these sites are still required to "implement appropriate erosion and sediment control BMPs to prevent violations of water quality standards." The waiver relieves the site operator of the requirement of getting a permit from Ecology and, if allowed by the local jurisdiction, allows them to forego preparation of a formal SWPPP. It does *not* relieve them of the responsibility of choosing and implementing appropriate BMPs. Further, consistent with the requirements in the CSWGP, these sites are still required to "comply with applicable local stormwater requirements" which may go beyond the requirements in either this permit or the CSWGP.

- The Phase II permits do not authorize the erosivity waiver; the permits give local jurisdictions the option of allowing the waiver.
- The CSWGP waives construction sites from Ecology's permitting requirements *for that permit only*. This permit, consistent with federal regulations, requires local governments to similarly regulate construction sites. The permittees will not be able to fulfill their obligation under this permit if site operators are not required to submit erosivity waiver applications to both Ecology and the local jurisdiction.
- The requirement to develop the portions of the SSP detailing the permanent stormwater controls for the site is not in conflict with the CSWGP. The intended "exclusion from stormwater permitting" applies only to the construction phase of the project. Project proponents are still required to implement permanent stormwater control measures.
- Ecology agrees that the Phase II permits should not require immediate sanctions for site operators that do not, in the course of operations, meet the requirements for getting an erosivity waiver. Permittees will determine their own enforcement strategies.

RTC # 1.77 CESCL Requirement

Note: Comments on this section of the permit were considered together for all three municipal stormwater NPDES permits.

Commenter(s): E4, E9, P17, W3, W4

Range of Comments on the issue:

- Requiring CESCLs is unnecessary, costly and unreasonable, particularly for small construction sites and those operators who have not experienced Ecology's Construction Stormwater General Permit or local erosion ordinances.
- Add option of being certified through CPESC (Certified Professionals in Erosion and Sediment Control) program.
- Ecology is requiring municipal staff who inspect construction sites be certified erosion and sediment control leads. This should not become a requirement until after sediment and erosion control ordinances have been adopted. This would allow sufficient tome for local government inspectors to seek out and obtain the necessary CESCL training.

Response to Range of Comments:

The on-site CESCL requirement is onerous, costly and unnecessary.

- Having the construction site operator (or a person immediately accessible to the construction site operator) trained on sediment and erosion control is necessary to control sediment and erosion at construction sites. Without proper knowledge and training it is unlikely that sediment and erosion control practices will be effectively employed at construction sites. Proper knowledge and training is required to:
  - Select, design and install appropriate sediment and erosion control BMPs
  - Evaluate the effectiveness of installed BMPs and determine if changes or modifications to installed BMPs are necessary, and maintain the SWPPP.
  - Assess compliance with local, state, and federal erosion and sediment control and water quality requirements

- Proper knowledge and training on sediment and erosion control practices is necessary for compliance with both local and state sediment and erosion control requirements. To ensure a minimal level of competence, Ecology has worked with a number of private vendors to develop a certification course for erosion and sediment control leads. This certified erosion and sediment control lead (CESCL) training ensures that project ESC leads have the knowledge and skills necessary to select, install, maintain and repair appropriate construction stormwater best management practices; and comply with local, state, and federal requirements. Utilizing this training, CESCLs will help prevent illegal discharges and permit violations which can potentially lead to large penalties and expensive "after-the-fact" engineering solutions. CESCLs will also be less likely to waste money on unnecessary, inappropriate, or improperly installed or maintained BMPs.

Persons who have a Certified Professional Erosion and Sediment Control (CPESC) certification should satisfy the requirement for CESCL

- Ecology agrees. A person who is a Certified Professional Erosion and Sediment Control (CPESC) has also met the minimum requirements for being a certified erosion and sediment control lead (CESCL). Ecology lists CPESC as an option to meet the CESCL BMP requirement in its stormwater management manuals.

Extend time for municipal staff inspector CESCL requirement

- The permits do not require that municipal staff inspectors be CESCLs. However, proper training of municipal staff inspectors is required to ensure they are qualified to do the job.
- The requirement for CESCL contained in the municipal stormwater permits is a requirement for local governments to include, within their construction site sediment and erosion control programs, a requirement that construction site inspections by the site operator be completed by a Certified Erosion and Sediment Control Lead. This requirement would not become effective until the local jurisdiction is required to adopt its ordinance for construction site sediment and erosion control. Ecology is working with private vendors and others to approve CESCL training programs and has recently expanded its list of authorized CESCL training programs. A list of approved training providers is listed on Ecology's website: http://www.ecy.wa.gov/programs/wq/stormwater/construction/.

PART II: RESPONSES TO COMMENTS ON EASTERN WA DRAFT PERMIT

EASTERN WA PHASE II S5: STORMWATER MANAGEMENT PROGRAM

RTC # 2.22 Enforcement of the Permit

Commenter(s): E3, E6

Comments:

- Ecology should take appropriate action to ensure that all entities listed in S1.D.2.a apply for coverage under the permit.
- Much enforcement of the provisions of this permit is left to local governments. Other state-led programs are not well-enforced at the local level. The city believes Ecology is responsible for enforcement of water quality issues.

Responses to comments:

- Ecology's enforcement approach will be fact-specific for each issue.
- Ecology acknowledges that there is some overlap in enforcement responsibilities for some actions, but in many cases local governments have more authority than Ecology. Local governments are required to report to Ecology on their permit-related enforcement actions.

RTC # 2.23 S5 SWMP Implementation Deadlines

Note, see also RTC # 1.23 Secondary Permittees

Commenter(s): E3, E5, E7, E10, E12, E15, E21

Comments:

- The timeline to meet permit requirements is too far into the future, near the end of the permit term, especially for municipalities that have been developing and implementing program elements. Timelines should be tightened up to require permittees to complete their SWMP on a much more aggressive schedule to ensure maximum benefit to water quality.
- S5.B.3 Specific implementation schedule concerns:
  - Why does completion of a map and field verification take the entire permit term? Should be completed no later than year 3.
  - The plan for non-stormwater detection should be completed within 2 years.
  - Distribution of information and establishment of a hotline are easy tasks that should be completed within 1 year.
- The time provided to develop the Good Housekeeping O&M plan is too long. This should be done within 2 years.
- S5.A.4.a compliance will not be possible "from the effective date of the permit." Need time to develop and adopt the "process for gathering, maintaining, and using information." Recommend one year from effective date of the permit.
- S5.B.4 and 5: Add back in the year that was taken off the original deadlines in the Preliminary Draft Permit to implement the ordinances. It will be a challenge for some permittees to go from adopting an ordinance by the end of year 3 to fully implanting the program one year later; they should have until the end of year 5.

Response to comments:

- Ecology determined the implementation schedule included in this permit based on discussions with permittees and other stakeholders over the course of developing the *Model Municipal Stormwater Program for Eastern Washington* (2003), the preliminary draft permit, and the formal draft permit. In determining the permit requirements, Ecology recognized that no single SWMP component exists independently. The implementation schedule, together with the requirement that permittees who are already implementing program components must continue to do so, represents a target both for smaller permittees to develop new programs and for larger permittees to update and expand their programs.
- Ecology agrees that a short period of time should be allowed for permittees to develop and adopt the "process for gathering, maintaining, and using information."

RTC # 2.24 S5.A Develop and Implement a Stormwater Management Program

Note: see also RTC # 2.25 Cost Tracking and Reporting

Commenter(s): E3, E10, E12, E14, and carry-over comments from Ecology's public process on revising the Underground Injection Control (UIC) rule

Comments:

- S5.A.1 Require the SWMP to be designed to ensure compliance with WQS
- S5.A.4.b The permit requires the permittee to include a discussion of the Permittee's evaluation of the effectiveness of the SWMP components implemented during the reporting period and earlier. Since the permit is based on the premise that implementation of BMPs is effective in meeting WQS, and since this permit requires implementation of Ecology-approved BMPs, this requirement does not seem useful and should be eliminated. The monitoring requirements in S8 will presumably be the basis for future evaluation of BMP effectiveness. The annual report of BMPs implemented should suffice to document effective compliance with the permit. Further speculation on BMP effectiveness will not be helpful.
- At this point it is inappropriate to assume that application of BMPs is not sufficient to protect water quality. Therefore, the evaluation of BMP effectiveness should be eliminated from this permit cycle.
- Page 7, line 11 "SWMP" refers locally to Spokane's regional "Solid Waste Management Plan." This usage may be common elsewhere. To prevent confusion, and because "stormwater" is one word, recommend Ecology use "SMP" as the acronym for "Stormwater Management Plan."
- To what extent does the SWMP required in this permit fulfill Ecology's requirements for municipal discharges of stormwater to UIC facilities? Can permittees apply the permit requirements to new UIC facilities to meet the presumptive approach in the UIC program? Please clarify the extent to which application of the SWMP in this permit meets the requirements of the UIC program for local jurisdictions.

Response to comments:

- This permit requires the SWMP to be designed to reduce the pollutants to the maximum extent practicable and to make progress toward compliance with WQS.

- The permit also requires the SWMP to be modified to address WQS violations to which stormwater is found to contribute. The municipal stormwater permitting program is based on adaptive management. Permittees must judge the effectiveness and appropriateness of the BMPs they have selected and implemented, and make changes where appropriate.
- Many BMPs that will be selected and implemented by permittees (for example, all of the possible public outreach and education methods) are not "Ecology-approved stormwater management BMPs." Further, many Ecology-approved BMPs will not function effectively under certain climatic or hydrogeologic conditions.
- In practice, each permittee may refer to the SWMP by any acronym they desire. However, for this permit, Ecology prefers SWMP to SMP which sometimes means Shoreline Master Plan. In California, the SWMP is referred to as the SQMP, for Stormwater Quality Management Program.
- The requirements of the UIC program will be met if a permittee chooses to apply their SWMP to areas served by UIC facilities, and adds to their SWMP to also implement the following requirements of the UIC program:
    - This permit does not require retrofits to fix existing problems. The UIC program requires retrofit of wells where water quality problems are identified.
    - This permit does not require assessment and evaluation of individual stormwater facilities to identify water quality problems. The well assessments will still need to be performed.
    - This permit does not require that local governments ensure that public (or private) UIC facilities are built according to the specifications in *Guidance for UIC Wells that Manage Stormwater*, ECY Publication number 05-10-067, revisions published in October 2006. Note that this guidance supersedes the guidance in Chapter 5.6 of the *Stormwater Management Manual for Eastern Washington* (2004).

  Permittees that use UIC facilities to manage stormwater must apply the *Guidance for UIC Wells that Manage Stormwater*, ECY Publication number 05-10-067, or more strict protections, to meet the UIC program requirements. They must also do the inventory and assessment required in registering their UIC facilities.

RTC # 2.25 S5.A.4 Cost Tracking and Reporting

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits –

- *See RTC #1.0 for the response to comments on this issue*

RTC # 2.26 S5.B Applying the SWMP to Non-UIC Discharges

Note: see also RTC # 2.24 Develop and Implement a SWMP

Commenter(s): E8

Comments:

- The permit language is unclear as to how discharges to non-UIC discharges to ground are to be handled by permittees. For example, how will such discharges

be mapped? What type of facility will be considered an "outfall" to an infiltration facility? Are rock sumps and roadside grassy swales that do not have a drywell covered under this permit? Mapping these facilities and the discharges to them will be difficult.

Response to comment:

- See RTC #30 S5.B.3 IDDE, the section on mapping, below. Overall, the permittees need to know which areas of their jurisdiction are served by various types of infrastructure and must develop each component of the SWMP to protect water quality as necessary and appropriate for each distinct area.

RTC # 2.27 S5.B Phrase "to the extent allowable under [state, federal, local] law"

Commenter(s): E4, E9

Comment:

- The draft permit, at several places, has sentences that end with phrases such as "to the extent allowable under local and state law," or "to ensure compliance to the extent allowable under state law," or "to the extent allowable under federal and state law." Examples of use of these phrases are found at: S5.B.5, page 17, lines 19-22; S5.B.5.a, page 17, lines 31-33; S5.B.5.a.i, page 18, lines 4-6; and S5.4, page 14, line 4. These phrases are vague and will require extensive legal research to guarantee compliance. In order not to create unnecessary burdens, the parameters should be provided, or the phrases deleted from the Permit.

Response to comment:

- Ecology agrees that the variations on this phrase introduce unnecessary confusion. This permit is consistent with the Clean Water Act and State Water Pollution Control Act, but Ecology acknowledges that other state and federal statutes may limit certain jurisdictional authorities.

RTC # 2.28 S5.B.1 Public Outreach and Education

Note, see also RTC # 2.23 S5 SWMP Implementation Deadlines

Commenter(s): E3

Comment:

- Require MS4 to provide the public with specific information about proposed authorized discharges and status of receiving waters.

Response to comment:

- Ecology agrees that this type of information might be appropriate for certain jurisdictions and discharges, but in other jurisdictions very basic general information about the impacts of stormwater and steps to reduce pollution are most appropriate for the target audiences. For this permit cycle, Ecology believes it is appropriate for each jurisdiction to determine the most appropriate messages.

RTC # 2.29 S5.B.2 Public Involvement and Participation

Note, see also RTC # 2.23 S5 SWMP Implementation Deadlines

Commenter(s): E3, E9, E10, E13

Comments:

- Require MS4 to provide the public with specific information about proposed authorized discharges and status of receiving waters, and opportunities for public input during site-specific implementation of the permit.
- S5.B.2.a At a minimum, a land developer and builder representative should be fully involved in the development, implementation, and update of the local government's SWMP.
- S5.B.2.a "No later than one year from the effective date of this permit ....create opportunities for the public to participate in the decision making processes involving the development, implementation and update of the SWMP..." This paragraph has the potential to expose a local agency to third party lawsuits. The local governing body has the final say on development and implementation of the SWMP and those decisions are based on finances, staff and local resources. This paragraph gives local public groups the ability to make decisions not based on finances, staff or local resources. These decisions could be prefaced with the threat of a lawsuit if their decisions are not acted upon. Paragraph should read "Not later than one year from the effective date of this permit...create opportunities for the public to participate in the public process involving the development, implementation and update of the SWMP based on local agency finances, staff and resources, including development...."
- S5.B.2.b "If the Permittee maintains a website, the SWMP that was submitted with the latest annual report, or a more current version, shall be posted on the website." This should not be a requirement. The permittees should have the reports available to the public as part of the public disclosure procedure but posting reports online should be the choice of to the local jurisdiction. Please remove this requirement.

Response to comments:

- Ecology agrees that water-body-specific information might be appropriate for certain jurisdictions and discharges. However, public review of each and every site-specific implementation is overbroad. Ecology does not agree that the permit should require site-by-site public overview of the SWMP and instead encourages the commenter to work with the local jurisdiction(s).
- Ecology supports the concept of advisory committee input into developing each component of the SWMP; however Ecology believes it is inappropriate for the permit to dictate the membership requirements of such committees.
- Ecology agrees that the intent of "participation" in this section is for the public to provide input, not control the decision making process. See language change below.
- The permit does not require posting of the annual report, it requires posting of the most current version of the SWMP. Ecology believes this requirement is appropriate.

RTC # 2.30 S5.B.3 Illicit Discharge Detection and Elimination

Note: see also RTC # 1.21 for Non-Stormwater Discharges and RTC # 2.23 S5 SWMP Implementation Deadlines

Commenter(s): E3, E8, E10, E12, E13, E14, E16

Comments:

Mapping requirements:

- S5.B.3.a.iii Require permittees to provide mapping information to the public
- S5.B.3.a.iii The permit requires submission of agency mapping information to Ecology. If Ecology wants to document the location of outfalls or other discharges, then that would seem an appropriate request. The requirements should be rewritten around that issue. General map submissions do not seem to relate to any relevant permit requirement and the requirement should be removed.
- S5.B.3.a.iii The permit requires submission of agency mapping information to Ecology. This requirement is overbroad and should be rewritten to include a map of say outfalls, if that is the information Ecology desires. Submission of agency mapping to Ecology and/or other entities covered under this permit seems excessive.
- S5.B.3.a.iii "....and/or other entities covered under this permit." Who are the other entities? Does this mean that far-removed cities could request copies of our maps or mapping information?
- P. 10, line 10 Does the map of "outfalls" include inlets to swales and rock sumps that do not have drywells? If the conveyance system consists of street gutters taking runoff in a neighborhood down to a low spot in the road right-of-way where the water soaks into the ground, would the mapping show the gutters as the conveyance system and the inlet to the low spot as the outfall? In some areas, water sheet flows off roads into roadside ditches that store water until it can infiltrate. Those ditches to not convey runoff. Our interpretation is that these ditches are not "facilities," not MS4s and there is no outfall; they are non-UIC discharges to the ground. Our interpretation is that we would not need to map such facilities, is this correct?

Field survey requirements for priority water bodies:

- S5.B.3.a.ii Define priority water bodies.
- S5.B.3.c.ii Our city only has 2 receiving water bodies.
- S5.B.3.c.ii The permit describes compliance as prioritizing discharged water bodies for inspection. The requirement based on water bodies is bound to create unequal compliance workload among Permittees. For instance, we have three surface water bodies into which stormwater is discharged, but more than 30 outfalls. The compliance criteria described in the permit would require us to inspect all of its outfalls within the permit cycle, while another agency with 10 outfalls into 10 water bodies would inspect only 40% of its discharges. We suggest a permit condition that requires inspection of all surface water outfalls during the permit cycle.

Ordinance:

- S5.B.3.b.i The permit requires an ordinance prohibiting illicit discharges on private property. Presumably this ordinance shall prohibit illicit discharges to the MS4, when an element of the MS4 resides on private property. This language should be clarified that only illicit discharges to the MS4 are prohibited.
- S5.B.3.c.v The permit lays out enforcement program requirements for local illicit discharge ordinances. Since the permit provides a long list of discharges to be

prohibited by the ordinance, including landscape irrigation runoff and street wash water, these enforcement program requirements should be narrowed in their application to illicit industrial or commercial discharges and formal investigations and enforcements of normal residential activity should not be included. Applying a strict enforcement program calendar to discharges that carry requirements to reduce and minimize undesirable discharges is bound to create confusion and unenforceable ordinances. This compliance program is best applied to industrial and commercial illicit discharges. If Ecology will require an enforcement program against the full list of prohibited discharges it must include criteria more flexible and applicable to the severity and type of violation.

IDDE procedures:

- S5.B.3.c.i Re-write this paragraph to say, "Every catch basin and manhole has the potential for an illicit discharge." This is more the truth and shorter and relieves the local agency of additional research when one knows that every manhole and catch basin has the potential to have an illegal substance dumped in it.
- Condition G3 appears to be more stringent than IDDE requirements that have slack timelines for addressing illicit discharges. S5.B.3.c.iii should be tightened to more closely mirror this section
- Page 13, Lines 7-11, Text indicates that permittees shall have procedures for removing the source of the discharge. We suggest that the first sentence should be changed to: "Procedures for handling illicit discharges, including …."

Response to comments:

Mapping requirements:

- Pursuant to S9.D, the permit requires mapping information to be available for public review at reasonable times, and for permittees to provide copies of documents at reasonable cost.
- The permit does not require that these maps be submitted to Ecology unless specifically requested. Ecology's request would specify the level of detail needed.
- The intent of requiring permittees to share mapping information is to facilitate coordination among adjacent permittees and/or permittees discharging to the same water body. Ecology does not believe that "far-removed cities" are likely to request such information.
- Ecology agrees that mapping discharges to ground from non-UIC facilities poses challenges. However, it will still be appropriate and helpful for SWMP development and implementation to have those areas mapped. Mapping the estimated geographic boundaries of these areas is required, but Permittees may use discretion as to what facilities to map within these areas. Some non-UIC facilities should be mapped in order for local jurisdictions to establish and implement O&M and inspection schedules required by this permit. UIC facilities will need to be mapped to meet the requirements of that regulatory program, but not to comply with this permit.

Field survey requirements for priority water bodies:

- For some jurisdictions it might be impracticable to require inspection of all known outfalls during a permit cycle. However, among those permittees who submitted

applications prior to February 15, 2006, no permittee estimated having more than 40 known outfalls to surface water, excluding bridge deck drains.

- For certain jurisdictions, it might be more appropriate to assess high priority *areas* than to assess high priority *water bodies*.

Ordinance:

- Ecology believes the language in S5.B.3.b is sufficient to clarify that the requirements in S5.B.3.b.i through viii apply only to discharges to the MS4.
- Ecology agrees that S5.B.3.c.v is primarily intended to apply to ongoing discharges that are imminent threats to human health and the environment. However, to comply with this permit, permittees must have and implement procedures for ending other illicit discharges.

IDDE procedures:

- Ecology agrees that every catch basin provides a potential source of illicit discharges, and that is why the entire MS4 must be mapped. However, Ecology believes it is appropriate for each jurisdiction to identify likely problem areas. For example, areas such as commercial districts with multiple restaurants are more likely to have IDDE problems than single-family residential areas.
- Condition G3 requires permittees to report imminent threats to human health or the environment to Ecology, who will respond according to agency procedures. Condition S5.B.3.c.iii requires permittees to develop their own procedures, which might include reporting to agencies besides Ecology.
- Ecology agrees that the goal of these procedures is ending the discharge, which might not necessarily involve removing the source.

RTC # 2.31 S5.B.4 Construction Stormwater Pollution Prevention

Note, see also RTCs for:

- *# 1.2 Prescriptive Permits/Review and Approve SWMPs*
- *# 1.10 Phase II One-Acre Threshold*
- *# 2.23 S5 SWMP Implementation Deadlines*
- *# 2.33 Erosivity Waiver*
- *# 2.35 CESCL requirement*
- *# 2.36 S5.B.5: sub- sections on Vesting and Record-Keeping*

Commenter(s): E3, E9

Comments:

General comments:

- The requirements for S5.B.4 and S5.B.5 are almost identical. S5.B.5 speaks primarily to construction controls. The W WA Phase II permit only has one section managing construction. S5.B.5.a.ii and iii include the phrases: "project proponents," "impervious surfaces created," "proposed land use," "facilitate plan review," "construction phase," "during construction," "site plan review," "prior to construction" and "during installation." These are all construction-phase requirements and should be contained in S5.B.4
- Require development of a program to meet WQS and avoid actions that cause or contribute to WQS violations, not merely "reduce pollutants." Construction sites are an area where it is easy and legally required to ensure that measures are taken to prevent actions that cause or contribute to WQS violations

Inspections:

- The CSWGP allows only authorized representatives of Ecology who present credentials and other legally required documents to enter and inspect a project site. Why does this permit not hold qualified personnel of the local jurisdictions to the same standard?

Response to comments:

General comments:

- The structure of this permit follows the federal "six minimum measures" that were used as the basis for developing the *Model Municipal Stormwater Program for Eastern Washington* (2003). Ecology believes the Model Program is a helpful tool for jurisdictions in eastern Washington, and since many jurisdictions are using it as a planning aide, it is appropriate for the permit to follow that structure. Under the permit, it is acceptable for jurisdictions to develop their ordinances and plan review, inspection and enforcement procedures for S5.B.4 and S5.B.5 either jointly or independently.
- Pursuant to S4, and as stated in the last phrase in S5.A.1, the SWMP must be designed to protect water quality.

Inspections:

- Ecology believes that each local jurisdiction will develop an appropriate process and methods for conducting inspections within the limits of their charter. The detailed requirements will be included in the ordinances adopted and permits issued by the jurisdiction.

RTC # 2.32 Overlap with the CSWGP

Comments:

- The requirement under the municipal stormwater permits to control stormwater runoff from construction sites is duplicative of the Ecology's construction stormwater general permit.
- The requirements for construction site are in conflict with what Ecology is requiring from construction sites under the construction stormwater general permit.

Response to Comments:

- There are overlapping regulatory requirements for construction sites. The overlap is a consequence of federal law and is not something that Ecology can fix without a change to state law. The federal CWA and EPA rules require construction site operators obtain an NPDES permit for any construction stormwater discharges to surface waters. This includes construction sites which discharge into a MS4 which in turn discharges to surface waters. EPA rules also require as one of the six minimum measures a program to control construction stormwater runoff into the Permittees MS4.
- Ecology has worked hard to ensure that the requirements for construction sites are to the extent possible the same under both the construction stormwater general permit and the municipal stormwater permits. Unfortunately due to requirements under state and federal law Ecology was not able to make the requirements identical under the two permits. Ecology has made sure that the requirements are consistent between the permits and has made sure that they do not conflict.

RTC # 2.33 Erosivity Waiver

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits. See RTC # 1.76

RTC # 2.34 SWPPP review and approval

Commenters: P-17,W-4, E-9, E-04, E-21, E-14, W-42, P-6, W-13, W-24, E-10, E-16

Comments:

- If the contractor applicant is developing a SWPPP (which includes a site map and engineered BMPs [if needed by the site]), why is a SSP necessary? (P-17/W-4/E-9)
- SSPs must be reviewed prior to development. (S.5.B.4.b.i, S.5.B.5.b.i). The CSGP requires a SWPPP to be "prepared and implemented … beginning with initial soil disturbance and until final stabilization." The MS4 permit represents a disingenuous repeal of Ecology's decision to comply precedent and require SWPPPs at the beginning of construction. (P-17/W-4/E-9, E-04)
- Core Element #1, Appendix 1, (Minimum Requirement #1, Appendix 1 of W WA permits), requires SSPs to be prepared. The Manual requires a "comprehensive report," which includes a site map, downstream analysis report, preliminary BMP design, permanent stormwater control plan, drainage report, construction plans. A single SSP could cost upwards of 20 thousand dollars. Contractors can barely afford to develop SWPPPs, let alone the myriad of complex, engineered reports and plans of a SSP. (P-17/W-4/E-9)
- The EPA requires "procedures for site plan review of construction plans that consider potential water quality impacts." (Eastern Fact Sheet 2.6). This suggests general consideration of erosion issues in the currently established platting or subdivision process, not a separate site plan review with a comprehensive SSP and SWPPP due at application. (P-17/W-4/E-9)
- In keeping with the guidance set out in 40 CFR 122.34 (e)(2) (*pertaining to small MS4s)*, the Permit should not add additional requirements to the minimum control measures without the agreement of the local jurisdiction. Ecology should remove the requirement to require construction stormwater pollution prevention plans, as well as other requirements for the control of stormwater runoff that exceed the minimum control measures from the Permit's scope. (E-14)
- Local governments do not have the resources, including manpower, to conduct SSP and SWPPP reviews before construction. If local governments are forced to do so, they will sacrifice other permitting efficiencies and services needed by the development community. (P-17/W-4/E-9)
- Perhaps the most egregious aspect of this permit, site plan review is unnecessary and extremely costly--to taxpayers, homeowners, contractors, and local governments. (P-17/W-4/E-9)
- SSPs must be reviewed prior to development. (S.5.B.4.b.i, S.5.B.5.b.i). Because SSPs include SWPPPs, this early review is onerous and contrary to legal precedent. Contractors already struggle to obtain timely permits from local

governments. Adding another review process will further aggravate delays in the permitting program and add to the cost of housing. (P-17/W-4/E-9)

- Early review of the SWPPP and Site Plans will cause additional delay for construction projects. (P-17/W-4/E-9, E-04)
- The Seventh Circuit Court of Appeals recently highlighted the difference between the individual and general permit process. Requiring "an additional public hearing for each individual NOI and SWPPP would eviscerate the administrative efficiency inherent in the general permitting concept." *Tex. Indep. & Ryalty Owners Ass'n et al, v Env't Prot Agency,* 410 F.3d 964, 978 (7th Cir 2005). Similarly, requiring local governments to institute early SWPPP review for the same projects obtaining a CSGP negates the efficiency intended for that program. (P-17/W-4/E-9)
- Page 15 of 50, Section S5.B.4.b.i (Eastern) "Prior to construction, Permittees shall review Construction SWPPPs ....an adequate SWPP for construction activity shall be prepared and implemented in accordance with the requirements of this permit beginning with initial soil disturbance and until final stabilization." Washington State Construction Stormwater General Permit 12-16-05. The language in these two permits appears to require review of SWPPPs at different times. Which permit takes precedence? (E-10)
- S5B4b is also contrary to the Fact Sheet, page 14, under Construction Stormwater General Permit, which reads: "Construction site operators that are covered under and operating in compliance with the construction stormwater general permit will be in compliance with the requirements of this permit." (E-04)
- Early review undermines the flexible nature and purpose of the general permit process. (P-17/W-4/E-9, E-04)
- Detailed, prescriptive, and enforceable requirements contained in the Construction Stormwater General Permit and included in this draft MS4 permit (i.e., required application of Eastern Washington Stormwater Manual) provide overwhelming assurances as to how municipalities will regulate stormwater discharges. Thus, early SWPPP review is not necessary to guarantee water quality protections (as compared to the municipal permit program at issue in *Environmental Defense Center Inc. v. EPA,* 344 F.3d 832 (9th Cir. 2003)). S5C4civ page 22, line 13. (P-17/W-4/E-9, E-04)
- By sub-division approval, does Ecology mean Engineering Plan approval? It is unclear what Ecology means by subdivision approval. Or does it mean Final Plat Approval after final mylars are submitted for recording to start the bonding process? Clarify final plat or final engineering approval. (W-42)

Response to Comments:

- A Stormwater Pollution Prevention Plan (SWPPP) includes the site erosion and sediment control plan, narrative, and BMPs for the construction phase of a project. The SWPPP is a component of the Stormwater Site Plan (SSP). The SSP includes a site map and structural and source control BMPs for permanent, post-construction stormwater facilities. Since Ecology's minimum requirements for stormwater management include planning for both construction **and** permanent

stormwater facilities and BMPs, the preparation of the SSP is required for local government review.

- 40CFR122.34 (a)(b)(4)(ii) states that *Your program must include the development and implementation of, at a minimum*: …4.(D) *Procedures for site plan review which incorporate consideration of potential water quality impacts*. Further, under iii) Guidance, the EPA recommends that *procedures for site plan review include the review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements*, and that *You may wish to require a storm water pollution prevention plan for construction sites within your jurisdiction that discharge into your system*. EPA rules require site plan review procedures to be in place at the local level, taking local sediment and erosion control requirements into consideration. Permit requirements do not go beyond EPA requirements, recommendations, or minimum control measures. Also, per 40CFR122.26 (1)(v)(A), permit requirements establish defined stormwater management programs. Ecology is requiring local governments to adopt a permitting process, which includes SSP (Western) and SWPPP (Eastern) review and enforcement of ordinances covering construction site runoff control.
- Ecology assesses whether BMPs are appropriate and adequate at construction sites by requiring monitoring through the NPDES Construction Stormwater General Permit. Ecology additionally requires local jurisdictions to review SSPs (in Western Washington) and SWPPPs (in Eastern Washington) for proposed development activities through the NPDES municipal stormwater permits to ensure the water quality of direct discharges to their MS4s, and to aid enforcement of local ordinances covering construction site runoff control.

RTC # 2.35 CESCL Requirement

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits. See RTC # 1.77.

RTC # 2.36 S5.B.5 Post Construction Stormwater Pollution Prevention for New Development and Redevelopment

Note, see also RTCs for:

- *# 1.2 SWMP Review and Approval/Prescriptive Permit*
- *# 1.10 Phase II One-Acre threshold*
- *# 2.23 S5 SWMP Implementation Deadlines*
- *# 1.60 Definitions*
- *# 2.67 Appendix 1, Core Element #7*

Commenter(s): C4, C5, C6, E3, E4, E5, E9, E10, E11, E12, E13, E14, E21, P1, P5, P9, P13, P14, P15, P16, P17, W3, W4, W13, W14, W24, W30, W31, W39, W40, W42, W47, W50

Comments:

General comments

- The requirements for S5.B.4 and S5.B.5 are almost identical. S5.B.5 speaks primarily to construction controls. The W WA Phase II permit only has one section managing construction. S5.B.5.a.ii and iii include the phrases: "project proponents," "impervious surfaces created," "proposed land use," "facilitate plan

review," "construction phase," "during construction," "site plan review," "prior to construction" and "during installation." These are all construction-phase requirements and should be contained in S5.B.4

- Require development of a program to meet WQS and avoid actions that cause or contribute to WQS violations, not merely "reduce pollutants."

Vesting

- S5.B.5, page 17, lines 19-22 read: "For new development and redevelopment projects that are vested before the effective date of this permit, Permittees must require post-construction stormwater controls to the extent allowable under local and state law." Laws regarding vesting prohibit state and local governments from applying new rules adopted after a completed application is filed. The sentence in the first paragraph above should be deleted and should instead state: "Permittees cannot require post-construction stormwater controls on projects that are vested before the effective date of this permit."
- S5.B.5.a.i illegally compromises long-standing vesting principles. This section provides in part: "[T]he ordinance or regulatory mechanism must apply…to all new development and re-development projects...that are vested after the effective date of the ordinance or regulatory mechanism, or three years from the effective date of this permit, whichever is sooner. To comply with this provision, new development and redevelopment projects that are vested after the effective date of this permit but before the adoption of the ordinance or regulatory mechanism, Permittees must require post-construction stormwater controls to the extent allowable under local and state law." Not only are these sections confusing, they direct local governments to disregard vesting laws. Only those regulations in place when a complete application is filed can be applied to a project. Until the local erosion ordinance is adopted, it can not be enforced against development and re-development projects, including those extending beyond Ecology's three-year limit.
- Page 17, Lines 38-43 "To comply with this provision, the ordinance or regulatory mechanism must apply, at a minimum, to all new development and re-development projects … and that are vested after the effective date of the ordinance or regulatory mechanism, or three years from the effective date of this permit, whichever is sooner." The last portion of this sentence may be in conflict with local regulations. It can be interpreted that after 3 years of the effective of this permit, all projects must comply with the ordinance. For example, our land actions are vested for 5-years after the initial plat application. I think what you are saying is: within three years from the effective date of this permit, all new development and re-development projects shall comply with the ordinance provisions unless vested. Please clarify.

Low Impact Development:

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits. See RTC # 1.12

- Under good housekeeping measures should include incorporation of low impact development measures for new and re-developed municipal facilities.

Record keeping:

- On p. 18, in S.5.B.5.a.i, second and third bullets indicate a different regulatory threshold than elsewhere in the permit. This conflicting language is also located on p. 16, in S5.B.4.b.i, first bullet and S5.B.4.c.iii, first bullet, and on p. 20, in S5.B.5.b.i, bullet.
- S5.B.5.a.i, 3rd bullet, A specific list of the records to be kept should be added.
- S5.B.5.a.i, 3rd bullet, The section requires that records be kept from the time the permit is effective, but allows Permittees to delay program development related to post-construction site stormwater management for several years. The records to be kept are not defined and the requirements to inspect sites are confusing. It could be read the records establish a backlog of sites to be inspected when the program inspections begin, thus putting every agency in a catch-up mode with regard to inspections. This should be clarified that inspections are required only of sites permitted after the effective date of the program element, not on the backlog of sites for which records are kept.

Required design methods and BMPs:

- S5.B.5.a.ii, 2nd bullet, 1st open bullet, There are numerous hydrologic methods available for calculating runoff volumes and flow rates. Some can be calculated easily and some require special computer programs. Requiring that an agency pick one is overly restrictive and unfair to small businesses. The method should fit the proposed project. This is an agency decision and should not be in the permit.
- The impermeability of our soils does not allow the use of many typical stormwater management practices. For example, drywell infiltration or pond retention and infiltration practices are not feasible solutions in this area.

O&M requirements:

- S5.B.5.a.ii, 3rd bullet, p. 18, line 38 reads: "All Permittees shall adopt requirements for project proponents to ensure adequate ongoing long-term operation and maintenance of the BMPs approved by the Permittee."
  - This sentence can be interpreted to mean that developers or subsequent owners of property must maintain BMPs in perpetuity. If this interpretation is correct, it is unreasonable form a practical point in tracking and enforcement. Recommend deletion of the sentence.
  - Are these temporary or permanent BMPs? Does Ecology intend for builders and developers to be responsible for maintenance and operation of BMPs in perpetuity? Any degree of responsibility after construction is unreasonable, economically burdensome, and fraught with liability that will limit project financing.

Inspections:

- The CSWGP allows only authorized representatives of Ecology who present credentials and other legally required documents to enter and inspect a project site. Why does this permit not hold qualified personnel of the local jurisdictions to the same standard?
- S5.B.5.c, p. 20, lines 14-37 "Structural BMPs shall be inspected at least once during installation by qualified personnel." "Structural BMPs shall be inspected at least once every five years after final installation…" Please clarify that the permittee is only required to inspect facilities owned by the permittee, not private

development. Local jurisdictions cannot be expected to inspect privately owned facilities indefinitely.

- S5.B.5.c.iii p. 20, line 22 – clarification: change "Structural BMPs shall be inspected ..." to "Structural BMPs authorized to discharge to the MS4 shall be inspected ..."

Response to comments:

General comments

- The structure of this permit follows the federal "six minimum measures" that were used as the basis for developing the *Model Municipal Stormwater Program for Eastern Washington* (2003). Ecology believes the Model Program is a helpful tool for jurisdictions in eastern Washington, and since many jurisdictions are using it as a planning aide, it is appropriate for the permit to follow that structure. Under the permit, it is acceptable for jurisdictions to develop their ordinances and plan review, inspection and enforcement procedures for S5.B.4 and S5.B.5 either jointly or independently.
- Pursuant to S4, and as stated in the last phrase in S5.A.1, the SWMP must be designed to protect water quality.

Vesting

- Many jurisdictions already require post-construction stormwater controls on development projects. The post construction stormwater controls required by this permit are not required to be applied to projects which are vested to earlier standards.
- Ecology agrees that both the last sentence of the first paragraph under S5.B.5, and the first and second bullets under S5.B.5.a.i, are unnecessarily confusing. Section S5.A.2 requires permittees to continue to implement existing stormwater management actions, including existing post-construction stormwater pollution controls.
- The third bullet under S5.B.5.a.i is intended to clarify that in order for permittees to track which projects less than one acre that are part of a common plan of development or sale are subject to the ordinance or other regulatory mechanism, the permit is only requiring tracking of such common plans from the effective date of this permit; they are not required to go back and figure out what prior common plans might be subject to the new regulations.

Low Impact Development:

Note: Comments on this issue were considered together for all three municipal stormwater NPDES permits. See RTC # 1.12

Record keeping:

- The requirement to keep records of common plans of development or sale from the effective date of the permit is intended to prevent improper vesting of projects that, taken together, disturb more than one acre. This concept is derived from the federal rules. Ecology decided that local jurisdictions should not be required to go back and figure out what common plans of development or sale approved prior to the issuance of this permit should have to follow the requirements of this permit.

- Ecology expects the following types of records to be kept in order to implement the permit requirements: final plat approvals, building and other permit applications and decisions, relevant official correspondence between the local jurisdiction and the developer, stormwater site plans, notes and findings from site plan reviews, notifications of or requests for changes, dates and observations of site inspections, and enforcement actions taken, if any. Most of these records are already being kept by local jurisdictions and are considered part of the public record.
- For the construction phase, Ecology expects that the records to be kept will include: SWPPPs, notes and findings from SWPPP reviews, notifications of or requests for changes, dates and observations of site inspections, and any enforcement actions taken.
- Pursuant to S5.B.5.c.ii and iii, sites must be inspected during construction/ installation of permanent stormwater controls and *at least* once every five years after final installation to ensure that proper O&M is taking place.

Required design methods and BMPs:

- The permit does not require that a permittee require a single hydrologic method; permittees can identify different options for different types or sizes of projects. Ecology believes this is an appropriate balance between the need for consistent application of stormwater controls in the jurisdiction and an overly prescriptive methodology.
- The *Stormwater Management Manual for Eastern Washington* (2004) includes a variety of BMPs, few of which are applicable in all hydrogeologic settings. The permittee should restrict allowable BMPs to those that are appropriate for the conditions that exist in their jurisdiction.

O&M requirements:

- Ecology agrees that it is not the responsibility of the project proponent, but rather the owner/occupier/operator of the property that is responsible for ensuring that long-term O&M is performed. It remains the responsibility of the project proponent to properly implement temporary BMPs.

Inspections:

- Ecology believes that each local jurisdiction will develop an appropriate process and methods for conducting inspections within the limits of their charter. The detailed requirements will be included in the ordinances adopted and permits issued by the jurisdiction.
- The permittee is responsible for ensuring that all structural BMPs discharging to the MS4, whether privately or publicly owned, are properly operated and maintained. The permit allows for third-party certification that O&M has been performed on private facilities.
- The suggested clarification as to discharges to the MS4 would apply to other subsections and is unnecessary because the overall SWMP requirements only apply to discharges into the MS4.

RTC # 2.37 S5.B.6 Good Housekeeping & Pollution Prevention for Municipal Operations

Note, see also RTC #23 S5 SWMP Implementation Deadlines

Commenter(s): E3, E10, E12

Comments:

- S5.B.6.a.i, 5th bullet, p. 22, line 18. Good housekeeping measures should include: outdoor water conservation measures such as limiting lawn irrigation that can reduce runoff into stormwater systems; and low impact development measures for new and redeveloped municipal facilities.
- Section S5.B.6.a.i, next to last bullet, p. 23, line 12. The permit requires an undefined evaluation of existing flood management projects associated with the MS4 to "determine whether changes or additions should be made to improve water quality." The permit is based on the premise that applying the BMP program to existing MS4 facilities will result in improved water quality. This required evaluation suggests a program of capital retrofits that is not required by the MEP standard and should be removed.

Response to comments:

- Ecology agrees that consideration of water conservation and low impact development practices is appropriate for municipal facilities.
- The permit requires an evaluation of at least five existing flood management projects associated with or discharging to the MS4 to determine whether changes or additions should be made. The permit does not require implementation of the identified improvements, if any were suggested as part of the assessment.

EASTERN WA STORMWATER MANUAL

RTC # 2.62 Appendix 1 Minimum Technical Requirements – Core Element #1

Note, see also RTC # 2.34 SWPPP Review and Approval

Commenter(s): E9

Comments:

- If the contractor is preparing a SWPPP why is a SSP necessary?
- This Core Element requires SSPs to be prepared pursuant to the *Stormwater Management Manual for Eastern Washington* (2004). It requires a comprehensive report including a map, downstream analysis, preliminary BMP design, and permanent stormwater control plan. A single SSP could cost upwards of $20,000. Contractors can barely afford to develop SWPPPs, let alone the myriad, complex plans of a SSP.

Responses to comments:

- SSPs include SWPPPs. Both temporary, construction-phase stormwater pollution controls and permanent stormwater pollution controls to meet post-construction requirements must be addressed.
- Preparation of complete SSPs is good engineering practice and will soon become common engineering practice where that is not already the case. The *Stormwater Management Manual for Eastern Washington* (2004) includes a boilerplate for efficiency for smaller sites, and not all elements need to be completed for all sites.

RTC # 2.63 Appendix 1 Minimum Technical Requirements – Core Element #2

Note, see also and RTC # 2.33 Erosivity Waiver and RTC # 1.17 CESCL Requirement

Commenter(s): E4, E9

Comments:

- The exposed soil requirements on p. 5 are limited and redundant
  - The MS4 Permit uses different wording than the Construction Permit. The Construction Permit uses area designation, rather than mean annual precipitation. The Permits should use consistent terminology.
  - The time restraints at sites with mean annual precipitation less than 12 inches [arid region] are unreasonable. Rather than this requirement being a mandatory imposition, it should be an optional BMP. The developer is responsible for determining and applying the most efficient BMPs. Covering exposed soils is expensive and may not be needed or the most efficient BMP at a given time. The cost of covering soils with blankets or plastic only adds to the cost of housing.

Responses to comments:

- The area designation for the Central Basin in the CSWGP is defined as areas having less than 12 inches of mean annual precipitation. The terms are consistent.
- The time restraints were taken directly from the *Stormwater Management Manual for Eastern Washington* (2004) and are intended to minimize the likelihood of significant soil erosion which can cause water quality violations. Ecology agrees that the BMPs may not always be necessary, but it is not possible for Ecology, the local jurisdiction or the developer to know whether erosion-causing rainfall will occur. Therefore, if soils will be exposed and unworked for 30 days or more in the dry season, or 15 days or more in the wet season, Ecology has determined that the risk of erosion-causing rainfall is great enough that preventive measures are required at the site. Developers insisting on leaving soils exposed and unworked for such long periods of time have the option of installing settling and filtration treatment BMPs to remove eroded sediment before runoff is discharged off site; this would need to be described in the SWPPP. This alternative is unlikely to cost less than soil stabilization.

Appendix 1 – Core Element #3

No comments received.

RTC # 2.64 Appendix 1 – Core Element #4

Commenter(s): E6

Comments:

- Preservation of natural drainages means to protect a natural resource from destruction, not provide benefits for stormwater management. Allowing urban stormwater runoff to enter natural drainages degrades natural resources and places people and their property in an unsafe environment. Only developers and local governments benefit from this provision.

Responses to comments:

- The intent of this Core Element is to encourage developers to limit the practice of clearing and grading an entire piece of land, and instead plan their development to maintain not only the natural drainages but also more of the topsoil and vegetation that limits the amount of stormwater runoff ultimately draining to a stream.

- Ecology does not have the authority to prohibit discharges of stormwater to streams; Ecology does have the authority to place certain limitations and expectations on managing those discharges.

RTC # 2.65 Appendix 1 – Core Element #5

Commenter(s): E3, E6, and carry-over comments from Ecology's public process on revising the UIC rule

Comments:

- Do not include the Spokane River in the list of exemptions from metals treatment requirements. Numerous Ecology publications and studies have documented the high levels of metals present in the river.
- Treatment BMPs treat ~90% of the runoff and remove 80% of the total suspended solids in that runoff, and the total quantity of pollutants removed still depends on the effectiveness of source control. When site conditions are appropriate, infiltration can potentially be the most effective BMP for runoff treatment. Infiltration is not feasible in our area.
- To what extent does the SWMP required in this permit fulfill Ecology's requirements for municipal discharges of stormwater to UIC facilities? Can permittees apply the permit requirements to new UIC facilities to meet the presumptive approach in the UIC program? Please clarify the extent to which application of the SWMP in this permit meets the requirements of the UIC program for local jurisdictions.

Responses to comments:

- Ecology agrees that the Spokane River should not qualify for the metals treatment exemption in the *Stormwater Management Manual for Eastern Washington* (2004) which was based on the size, not the quality, of the Spokane River. In August 2006, Spokane County and the Cities of Spokane and Spokane Valley submitted the *Spokane Regional Stormwater Manual* to Ecology for review and approval. This version of the *Spokane Regional Stormwater Manual* does not exempt discharges to the Spokane River from metals treatment.
- Ecology agrees that infiltration is the preferred method for managing stormwater runoff (and even then, pre-treatment is appropriate for many sites). Unfortunately its practical application is limited in some areas of eastern Washington, and that is why the *Stormwater Management Manual for Eastern Washington* (2004) and this Appendix include requirements for various methods of treatment to address discharges to surface water bodies.
- The requirements of the UIC program will be met if a permittee chooses to apply their SWMP to areas served by UIC facilities, and adds to their SWMP to also implement the following requirements of the UIC program:
    - This permit does not require retrofits to fix existing problems. The UIC program requires retrofit of wells where water quality problems are identified.
    - This permit does not require assessment and evaluation of individual stormwater facilities to identify water quality problems. The well assessments will still need to be performed.

- This permit does not require that local governments ensure that public (or private) UIC facilities are built according to the specifications in *Guidance for UIC Wells that Manage Stormwater*, ECY Publication number 05-10-067, revisions published in October 2006. Note that this guidance supersedes the guidance in Chapter 5.6 of the *Stormwater Management Manual for Eastern Washington* (2004).

Permittees that use UIC facilities to manage stormwater must apply the *Guidance for UIC Wells that Manage Stormwater*, ECY Publication number 05-10-067, or more strict protections, to meet the UIC program requirements. They must also do the inventory and assessment required in registering their UIC facilities.

RTC # 2.66 Appendix 1 – Core Element #6

Commenter(s): E6, E9

Comments:

- Control of stormwater through infiltration is not feasible in this area.
- Does the 10,000 SF threshold of impervious surface on p. 14 include all impervious surfaces in a subdivision: is it cumulative or single surface?

Responses to comments:

- Ecology agrees, and that is why the *Stormwater Management Manual for Eastern Washington* (2004) and this Appendix include requirements for flow control to address discharges to surface water bodies. Note that the requirement addresses the smaller, more frequent events that determine channel morphology in order to protect instream habitat; the requirement does not address during infrequent large events that produce widespread flooding.
- The 10,000 SF threshold on p. 14 is cumulative. For the example of a subdivision, all streets, driveways, and roofs are included. Project engineers and local governments have some leeway in interpreting whether disconnected, discrete impervious surfaces may not contribute runoff to the collection and conveyance system for which flow control is otherwise required.

RTC # 2.67 Appendix 1 – Core Element #7

Note, see also RTC #36 S5.B.5 Post Construction Stormwater Pollution Prevention for New Development and Redevelopment

Commenter(s): E9

Comments:

- On p. 16, regarding "where structural BMPs are required, projects shall operate and maintain the facilities in accordance with an O&M plan"
  - What BMPs are regarded as "structural"?
  - Creating an O&M plan is costly and raises liability concerns.
  - "Projects" inappropriately places long-term O&M on the builder or developer, when the responsibility will remain with the property owner or their designee.

Responses to comments:

- Structural BMPs include constructed source control, runoff treatment, and flow control facilities – as opposed to operational BMPs such as street sweeping. For

some of these facilities, an annual inspection is sufficient regular O&M. For others, regular cleaning and other maintenance is required.

- Ecology disagrees that an O&M plan raises liability concerns. Without proper O&M, many stormwater controls will fail and could cause downstream damage, so the absence of proper O&M is a much greater liability concern. The *Stormwater Management Manual for Eastern Washington* (2004) includes standard O&M practices upon which the project proponent may rely, thereby minimizing the cost to prepare the O&M plan.
- Ecology agrees that the intent of this Core Element is for the property owner to have long-term responsibility for O&M.

APPENDIX 3

RTC # 2.68 Appendix 3 Report Forms for Cities, Towns and Counties

See also RTC # 1.0 Cost Tracking and Accounting

Commenter(s): E4, E10, E14

Comments:

- We recommend that questions be listed in the same relative order for each year.
- We are concerned that reporting any non-compliance with the schedules in the permit will invite third-party lawsuits.
- Where in the annual report is the summary of public education efforts noted in S5.B.3.e to be included?

Responses to comments:

- Ecology agrees that it is helpful to have questions listed in the same relative order and has tried also group questions on similar topics.
- Through the annual report, Permittees are held accountable for complying with the permit requirements.
- Ecology agrees that the reporting requirements for the information listed in S5.B.3.e need to be clarified.

FACT SHEET

RTC # 2.69 Fact Sheet

See also RTC #20 S2 Authorized Discharges
and RTC #21 Non-Stormwater Discharges
and RTC #25 Cost Tracking and Accounting

Commenter(s): E10, E12, E14, E16

Comments:

- "SWMP" refers locally to Spokane's regional "Solid Waste Management Plan." This usage may be common elsewhere. To prevent confusion, and because "stormwater" is one word, recommend Ecology use "SMP" as the acronym for "Stormwater Management Plan."
- We understand that Ecology updated this version "substantially, compared with the preliminary draft version" however the reiteration of statements similar to this one throughout the fact sheet is unnecessary. Elimination of all references to how

Ecology "added to the permit" would simplify the document. If people are interested they can compare the preliminary draft and the current draft to see what changes Ecology has made. Do not discuss previous versions of the draft. Keep to the facts and only discuss what this current draft has to offer. If possible, summarize sections or eliminate any unnecessary text. For example provide appendices for what entities are covered under this permit, which are exempt, and reasons why, legal discussions, and tables. Making the fact sheet a more "reader friendly" document might limit the volume of phone calls that will have to be answered by Ecology and local agencies from citizens trying to understand this permit.

- In the section on S2.A.4, to clarify intent, change "under the federal CWA" to "under the federal rules" because UIC is under the federal Safe Drinking Water Act.
- The statement in the section on S4 "evolve towards eventual compliance with WQS through successive permit cycles" assumes that MS4s are not in compliance with WQS. Does Ecology have data on all MS4s to support this statement? This type of statement opens the door to third party lawsuits.
- In the sections on S5.B.3 and S5.B.3.b: Emergency should be placed in front of fire fighting activities to be consistent with the NPDES permit. If emergency is not inserted, what sort of fire fighting activities are included or excluded?
- The section on S5.B.3.c.ii includes the statement "As an ongoing activity, but not as a requirement of the permit, Permittees should identify areas of industrial activity served by the MS4 that require coverage under the ISWGP, determine whether coverage has been obtained, and inform Ecology if coverage has not been obtained." Ecology is suggesting that local jurisdictions carry an enforcement role that the state does not have resources to support. Permittees don't have these resources either. Remove this and all other statements that permittees should perform a function not required by the permit from the fact sheet.
- In the section on S5.B.4: To the statement "This requirement is limited to projects which disturb one acre or more" add: "and are connected to waters of the State" at the end.

Responses to comments:

- In practice, each permittee may refer to the SWMP by any acronym they desire. However, for this permit, Ecology prefers SWMP to SMP which also means Shoreline Master Plan. In California, the SWMP is referred to as the SQMP, for Stormwater Quality Management Program.
- The Fact Sheet is a record of Ecology's deliberations and actions on the permit. We understand the desire to keep it simple but also want to include information about the public process that preceded this official Response to Comments on the formal draft of the permit.
- The permit has a limited scope and is not sufficient in and of itself to protect water quality from stormwater impacts. Recommendations in the fact sheet are not permit requirements.

PART III: RESPONSES TO COMMENTS ON PHASE I DRAFT PERMT

PHASE I S5: STORMWATER MANAGEMENT PROGRAM

RTC # 3.1 Content of the SWMP

Note: See also RTC 1.24 for TMDLs

Commenter(s): P1, P2, P3, P5, P6, P10, P11, P13, P14

General Comments

- Ecology review and approval of SWMPs and/or annual reports – so permittees have assurance of compliance. (P6)
- If no Ecology review and approval, then must explicitly state that failure to achieve minimum elements constitutes permit violation (P13, P14)
- Subparagraph S5.C.4 should be amended to require Ecology review and approval of the SWMP, and incorporate the terms of the SWMP into the permit. (P11)
- SWMP should be available for public review as soon as they are completed and comply with CWA requirements. (P6)
- Concern about applicable TMDLs including TMDLs adopted after issuance of the permit but prior to the date of permittee's application. Ecology should clarify that such TMDLs may be incorporated only after a permit modification or through an administrative order. (P2)
- Request clarification on how additional actions and activities to implement TMDLs will be incorporated into the permit. (P6)
- Add the following sentence to S5.A.: *SWMP components and other permit terms do not require permittees to violate or exceed the limits or authorizations set by any local, state or federal law*. (P6)
- S5.A.1. Permittees should be required to submit SWMP updates with each annual report. (P13, P14)

S5.A.2. Cost Tracking and Reporting

- Delete the cost instructions in Appendix A3, and replace the language in S5A2 with the following language
  - *"S5.A.2: Each permittee shall track the estimated cost of development and implementation of the SWMP required by this section, and report this information in the annual report. Cost estimates may be based on actual expenditure data, or on surrogate parameters such as engineer's cost estimates for permit-related elements of construction projects, or similar estimates based on documentable information and commonly-accepted professional practices. In the event that estimates of expenditures are used, the permittee shall describe the estimation method and the documentation used as a basis."*

Justification: The methods for tracking costs in Appendix A3 as referenced in S5A2 are far too complicated will not lead to useful cost comparisons. The methods must be robust, simple, and lead to documentable estimates. (P1, P3)

S5.A.3
States that permittees shall track certain activities "as stipulated by the respective program component" – what does this mean? (P13, P14)

S5.B. SWMP = MEP and AKART
Commenters: P3, P5, P6, P10, P13, P14

- State that SWMP = MEP and AKART (P3, P5, P6)
- Phrase "protect water quality" is too vague. Replace with "ensure discharges will not cause or contribute to violations of WQ stds." (P13, P14)
- Add protection of sediment quality to purpose of SWMP (P10)

S5.C. General Comment

- The permit should clarify that the general statements labeled as "a" are implemented by the specific actions labeled as "b." (P6)

Response to Comments:
General Comments

- Comments noted.

S5A2 Cost tracking and reporting

- See RTC # 1.0

S5A.3

- Comment noted.

S5.B SWMP = MEP and AKART

- See RTC # 1.22 Compliance with Standards

S5.C. General Comment

- Ecology agrees this is a useful clarification, and changed the permit accordingly.

RTC # 3.2 S5.C.1 Legal Authority
Commenter(s): C1, P2, P4, P6, P7, P13, P14, P16
Range of Comments:

- No issues with the current draft of this section. (C1)
- As written, the condition is unreasonable in that it assumes that municipalities can guarantee outcomes. (P2)
- Are co-applicants the same thing as co-permttees? If so, the language should be consistent. Such agreements between co-permittees and secondary permittees are probably needed, but not just because some entity touches your borders, or you share discharges. Ecology must recognize it has a compliance role after reasonable attempts at problem-solving have been made between entities. (P4)
- Suggest returning to 40 CFR 122.26(d)(2)(i)(A)-(F), which required that applicants "can operate pursuant to legal authority established by statute, ordinance, or series of contracts which authorizes or enables the applicant…" Drafting reflects the measures which could be in place by the permit's effective date. Permittees have municipal power to maintain the authority in place at the time of the Part II application. Permittees can regulate others through municipal authority but cannot guarantee outcomes. (P6)

- Add the statement "control through ordinance, order, or similar means" to S5.C.1.b.i, ii and iii. (P6)
- How does the permit ensure permittees have the requisite legal authority? Why was requirement to provide a statement to that effect removed? (P13, P14)
- Interlocal agreements described in this section should be subject to public review. Agreements should be required to integrate goals and policies of previous watershed plans. Should require reporting on intended scope, timeframe for completion and with what entities agreements will be made. Should build on first permit and not treat this as something new. (P16)

Response to range of comments

- Co-applicants is the wording used in 40CFR122.26(d)(2)(i). In response to comments on the preliminary draft Ecology revised the wording to reflect EPA regulations.
- Ecology does not agree with the comment that the legal authority necessary to implement the permit is something that can be met through measures which could be in place by the permit's effective date. Legal authority to implement the permit was an application requirement for all Phase I permittees, and is an on-going requirement of this permit.
- Ecology agrees with the comment adding the phrase "control through ordinance, order, or similar means" to S5.C.1.b.i, ii and iii. Addition of this phrase clarifies that permittees are exercising control through an ordinance, order or similar means, all of which have limitations and do not assume the permittee can guarantee outcomes.
- Permittees will demonstrate adequate legal authority through the written documentation of the SWMP required in S5.A.1, and annual reports.
- Interlocal agreements are public documents and available to the public for review.

RTC # 3.3 S5.C.2 Mapping and documentation

Commenter(s): C1, C2, C6, P3, P5, P6, P7, P13, P14, P16

Range of General comments

- Developing and maintaining maps of connections and outfalls, including tributary conveyances, etc., is crucial to effective stormwater management. P13, P14

Response to general comment:

- Ecology agrees that maps of the MS4, BMPs, and sources contributing to the MS4 are crucial to effective stormwater management. To be successful, permittees must have complete and accurate knowledge of what is regulated under this permit.

Range of comments on S5.C2b.i – Mapping outfalls and BMPs

- Is permittee out of compliance if one known outfall isn't mapped? Permit should require program to map all existing structures and ensure that new public structures are added as they pass to permittee ownership and as privately-owned BMPs become operational. (P5)

- What is a structural stormwater BMP that must be mapped? Is the intent to include catchbasins and oil water separators? (P5)
- Require mapping of connection points between municipal systems. Drainage areas may not be to outfalls, but to another permitted or non-permitted system. (P5)
- Clarify mapping requirement applies only to "outfalls known to and owned or operated by the permittee." (P6)

Response to S5.C2b.i – Mapping outfalls and BMPs

- Ecology can understand the concern that a permittee may be out of compliance with the permit if one known outfall is not mapped. However, mapping is key to having thorough knowledge of the MS4. Ecology does agree that mapping outfalls should not end at the 2 year deadline, as additional outfalls become "known" they should added to the map. Mapping of new structures should also be added on an ongoing basis.
- Ecology agrees it is necessary to clarify structural BMPs that must be mapped.
- Ecology agrees that mapping connection points between systems is needed if permittees are going to successfully manage stormwater where systems are interconnected.
- Clarification is provided in S5.C that the entire SWMP applies only to municipal separate storm sewers owned or operated by the permittee.

Range of Comments on S5.C.2.b.ii – Mapping attributes of areas draining to 24" outfalls

- Only require mapping of attributes of areas draining to 24" outfalls if information is needed for something. (P3)
- Require mapping of tributary drainage areas for ALL outfalls in the UGA, not just 24" or greater. (P5)
- What is purpose of land cover classification? Defining purpose makes task easier to do. (P5)
- Mapping associated drainage areas to all outfalls is a major task, limit to a maximum area or outfall size threshold. (P5)
- Ecology should standardize how permit categorizes "land use descriptions." (For example by %TIA) (P5)
- Mapping attributes is required in the present permit yet little progress was made toward this requirement. The industrial requirement referred to in the fact sheet is absent from the permit. (P16)

Response to S5.C.2.b.ii – Mapping attributes of areas draining to 24" outfalls

- Mapping of attributes of areas draining to 24" outfalls is required so permittees will have a thorough knowledge of the MS4 covered under this permit. It is often too late to conduct mapping when information is needed for specific IDDE or source control efforts.
- Mapping tributary drainage areas is difficult and expensive, and Ecology has determined it is appropriate to phase in more detailed mapping over successive permits.

- The permit does not require mapping of land cover classification. Land cover classification data for Western Washington is available on the Ecology webpage at: http://www.ecy.wa.gov/services/gis/data/impervious/basins.htm
- The permit does limit mapping of associated drainage areas to 24" outfalls.
- Ecology agrees it might be useful to standardize land use descriptions, however, we expect Permittees will rely on comprehensive planning and zoning maps to meet this requirement and municipalities define land use classifications differently.

Range of Comments on S5.C.2.b.iii and iv – Mapping connections

- The permit needs to define "allowed connection" that must be mapped– is a residential driveway a connection? What does "allowed" mean? Often connections are hard to find and final plan drawings are not available. (P5)
- This requirement should be to maintain a map of known connections. (P5)
- Permit needs to clarify "connection." Consider not including individual residential driveway connections, and including private roads with more than one address or tax lot. (P5)
- Consider focusing on areas where there are known problems and land uses more likely to produce illicit discharges. This should include areas that do not drain to larger outfalls.
- The definition of higher density rural areas is unclear – should probably state 50% of subbasin area is parcels smaller than 5 acres. Don't add "portion thereof" without more clarification. (P5)

Response to the range of comments:

- Ecology agrees that the mapping of existing connections must apply to "known" connections.
- Ecology agrees that clarification of "connection" and "authorized or allowed connection" is needed. Connections mean all discrete piped, ditched or channelized connections into the MS4, except for individual residential driveway and roof drain connections. Authorized or allowed connections means connections that are individually granted permission by the permittee to discharge into the MS4.
- Ecology agrees to clarify definition of urban/higher density rural sub-basins.

Range of Comments on S5.C.2.b.v – Mapping areas that do not drain to surface water

- Mapping of areas not draining to surface water is not very useful since infiltration BMPs are also used in areas that drain to surface water. (P5)
- Separating UIC wells and NPDES regulated structures into separate regulatory schemes is problematic. One structural BMP can combine UIC and non-UIC infiltration features. (P5)
- Mapping areas that drain do not drain to surface water requires mapping areas that drain to UIC wells, this should not be a requirement of this permit. (C1, P3)
- Requiring mapping of areas that drain to ground is confusing – need clarification on what is meant and what level of detail is expected. Recommend removing requirement. (P6, P7)

Response to the range of comments:

- Ecology is requiring that permittees map general geographic areas that do not drain to surface water because this permit also regulates discharges to ground. This does not include areas that generally drain to surface water that also use infiltration. Ecology is not requiring mapping of individual infiltration facilities, and considered splitting UIC from non-UIC areas burdensome. Permittees may separate out areas served by UIC facilities when meeting this requirement.

Range of Comments on S5.C.2.b.vi – Making maps available to Ecology

- Add "to the extent consistent with national security laws and directives" to making maps available. (P6)
- There are still some problems with the Ecology preferred electronic format – see King County's comment. (P3)

Response to the range of comments:

- Ecology agrees that providing maps should be consistent with national security laws and directives.
- Ecology acknowledges there are still some problems with the preferred electronic format. Ecology will work with permittees to ensure compatible mapping standards when requesting maps.

Range of Comments on S5.C.2.b.vi – Providing mapping data to co-permittees and secondary permittees

- Permittees should be compensated for providing mapping data to secondary permittees (P3)

Response to the range of comments:

- The permit does not restrict normal cost recovery for GIS/mapping services.

Range of Comments on S5.C.2**.** Deadlines

- All known outfalls should be mapped within 6 months. Fines should be levied if not completed in time. (C6)
- Map of attributes for all outfalls should be completed in 1 year. Fines should be levied if not completed in time. (C6)
- What is Ecology justification for giving Phase I permittees 2 more years to map all known outfalls when this is a requirement of current permit? Does this comply with anti-backsliding prohibition? How does this constitute MEP? (P13, P14)

Response to the range of comments:

- Ecology does not agree with the suggested 6 month and 1 year deadlines for mapping. These timeframes are not adequate to complete the required mapping.
- Under the previous municipal stormwater NPDES permit permittees have implemented programs to map outfalls. The large geographic areas covered under this permit make it difficult to find outfalls. This permit sets a time frame to complete mapping of all known outfalls, and creates a requirement to continue mapping as more outfalls are found.

RTC # 3.4 S5.C.3 Coordination

Commenter(s): C1, P1, P3, P4, P5, P6, P7, P9, P13, P14, P16

Comments on Internal coordination

- Delete the requirement for written internal coordination agreement. (P1)
- Why prepare internal agreements, isn't completing the activities and reporting on them enough? (P5)
- Permit should allow Executive Directives as an alternative to negotiating a single coordination agreement among departments. (P6)
- Not clear what agreements would consist of, perhaps procedures would be better. (P13, P14)
- Intragovernmental cooperation should ensure compliance, not just facilitate compliance. ((13, P14)

Response to the range of comments:

- Ecology's experience with implementing the previous Phase I municipal stormwater NPDES permits identified the need for clearly defined internal coordination to achieve compliance with the permit.
- Ecology agrees that an Executive Directive is an acceptable alternative to negotiating a single coordination agreement among departments.

Comments on Intergovernmental coordination

- Change the intergovernmental coordination requirement to state clearly that the responsibility of each permittee is to make reasonable attempts to coordinate. Permittees should only be accountable for actions they have control over. (P1)
- The requirement for intergovernmental coordination should be included in the Phase II permit. (C1, P3)
- Delete S5.C.(b)(ii) regarding an integrated monitoring program, this is not part of the monitoring requirements. Should only be required if the integrated monitoring program option from S8 is chosen. (P1, P3 P5, P6)
- Intragovernmental coordination was worked out during the first permit term and doing this now is needless paperwork that carries no legal requirement. (P4)
- Are signatures from all other permittees required from existing watershed councils? If one refuses does that cause others to be out of compliance? (P4)
- Don't require coordination to develop an integrated monitoring program, except for TMDL monitoring. (P4)
- Interlocal agreements should be developed where permittees decide they are needed, not as a requirement. (P5)
- Permittees should not be subject to a permit violation for actions of others they have no control over. (P1, P4, P5)
- Require process for coordinating activities, instead of requiring coordination. (P6)
- Not clear what must be in agreements to comply with this requirement. Potentially very high effort for low benefit. Permit may encourage intergovernmental coordination, but it should not be required. (P7)
- Support coordination measures among permittees. (P9, P13, P14)
- Recommend extending coordination requirement to monitoring (P9)
- Strengthen provision by replacing "to encourage" with "to ensure.' (P13, P14)
- Require coordination to establish complementary and comprehensive plans, policies and regulations. (P13, P14)

Response to the range of comments:

- Ecology agrees that the permit must include an explicit statement that Permittees are not subject to a permit violation for the actions of others they have no control over.
- Ecology agrees that a coordination expectation must be added to the Western Washington Phase II permit.
- Ecology agrees that the requirement for an integrated monitoring program should be deleted from this section. This is allowed as an option in the monitoring requirements in S8 and should not be required here.

Comments on S5.C.3 Deadlines

- Extend the deadline for agreements among permittees until secondary permittees and Phase II permittees have developed stormwater programs. (P5)
- Extend the deadline for intergovernmental coordination mechanisms from 12 months to 24 months. Agreements will require Council/Executive approval, and some waterbodies are shared by many permittees. (P6)
- Add deadline that acknowledges secondary permittees getting coverage later than effective date, suggested 24 months. (P6)
- Shorten both deadlines in this permit condition to 6 months. (P13, P14)

Response to the range of comments:

- Ecology agrees that the deadline for coordination mechanisms should be extended until Secondary Permittees and Phase II Permittees have developed programs, and to allow time for gaining Council/Executive approval.

RTC # 3.5 S5.C.4 Public Involvement and Participation

Commenter(s): C1, P3, P6, P7, P11, P16, P17

Range of Comments

- The fact sheet states that existing public involvement activities will meet this requirement, however, creating opportunities for public participation in the implementation and update of SWMPs is new. Delete existing language and require continuation of existing activities. (C1, P3)
- Delete the phrase "in the decision making process." (P6)
- Delete "in an advisory role" and "decision making." (P7)
- EPA rules require public involvement and participation. The permit only requires involvement, this is a lower standard. Public review of each submittal should be required. (P16)
- The building community should be adequately represented in the public participation process. (P17)

Response to the range of comments:

- Ecology does not agree that creating opportunities for public participation in the implementation and update of SWMPs is new. Existing Phase I SWMPs include volunteer monitoring programs, riparian vegetation planting, and other similar programs that are public involvement opportunities in program implementation. In addition, SWMP updates that involve amendments to ordinances or budget adoption also include public involvement opportunities.

- Ecology agrees with comments calling for deleting "in an advisory role" and "decision making." Public participation takes many forms, and should not be restricted to advising on decision making.
- Ecology supports inclusion of the building community in the public participation process.

Comments on S5.C.4 deadlines

- Extend deadline from 6 months to 12 - 18 months. (P7)

Response to the comment*:*

- Ecology does not agree with the requested extension of the deadline. Public involvement is an important feature in a successful SWMP and Phase I permittees should already be involving the public in the development, implementation and updating of their SWMP.

RTC # 3.6 S5.C.5 – Controlling Runoff

Summary of issue: Comments on controls on new development and redevelopment
Commenter(s): C1, C5, C6, P2, P3, P5, P6, P7, P9, P13, P14, P16, P17

Comments on S5.C5 – general comments

- Support use of the 2005 manual. (P9)
- Urge Ecology to prioritize review of the King County SWDM since many Phase II cities have already adopted. (C1)

Response to the range of comments:

- Comments noted

Comments on S5.C5.a.

- Prevent and control impacts of runoff from new development is a different standard from EPA's Phase I application requirements which requires permittees to "develop, implement and enforce controls to reduce the discharge of pollutants." (P2)

Response to the range of comments:

- EPA established application requirements for the Phase I permit. Ecology set permit requirements for this permit and the Phase II permits.

Comments on S5.C.5.b.i – adoption of Appendix 1

- S5.C.5.b.i is vague because it fails to state when a municipality will be in compliance with the permit. Also Ecology must provide more detail about a process that involves more stringent requirements. (P2)
- The permittee should have the discretion to allow only those manual BMPs that it deems to be effective at treating stormwater, cost effective to maintain and replace, and capable of being maintained through available legal authority. (P5)
- How will Ecology determine whether alternative minimum requirements, thresholds and definitions are equivalent to those in Appendix 1? If Ecology Makes such a determination will it then issue a permit modification? If not, why not? (P13, P14)

- Language allowing tailoring of requirements through use of basin plans should be strengthened to *require* more stringent requirements as necessary to ensure compliance with water quality standards. Salmon recovery plans should be allowed planning effort. Tailored requirements should be required to provide *superior* protection and levels of pollution control. (P13, P14)

Response to the range of comments:

- Ecology does not agree that S5.C.5.b.i is vague. The standards the must be met are described in the body of the permit and Appendix 1.
- Ecology agrees that permittees are allowed the discretion to allow only BMPs from the 2005 Ecology manual they deem appropriate in the requirements adopted at the local level. Permittees may not add additional BMPs that are not approved by Ecology.
- Ecology's review of local manuals and ordinances is based on the equivalency criteria for local manuals written in S5.C.5.b.i and ii, and on the minimum requirements, definitions and thresholds in Appendix 1 of the permit. Ecology agrees that permittees must submit documentation of any requirements which differ from those contained in Ecology's manual and justify the difference. Ecology does not agree that the equivalency determination is a modification of the permit, and does not require a public review process. However, when Ecology receives manuals and ordinances for equivalency review we plan to post a notice on the Ecology stormwater webpage and members of the public may send a request to receive direct notice of Ecology's equivalency determination. Ecology also plans to post a notice of decisions on manual equivalency on the Stormwater webpage and send a direct notice to those who requested it.
- See the sections of the Response to Comments on basin planning and Appendix 1 for Ecology's response on comment relating to basin planning, above.

Comments on S5.C.5.b.ii – Site planning process, and BMP selection and design criteria

- S5.C.5.b.ii. Can Ecology consider allowing the WSDOT manual for the permittee's road projects? (P5) [reference RTC on Appendix 1]
- Delete the last sentence of S5.C.5.b.ii. Because Ecology is proposing to issue a prescriptive permit which establishes MEP and AKART and meets NPDES obligations by requiring specific sections, Ecology should clarify that the legal requirements stated in this subsection are met when the Permittee follows the 2005 SMMWW (or Ecology approved equivalent). Without this assurance that Permittees have fulfilled their obligations, the open ended requirements to "protect water quality," reduce pollutants to MEP and meet AKART would be vague, overbroad and uncertain and should be deleted. Furthermore, in an MS4 permit all requirements must be subject to MEP. (P6)
- Define site planning process. (P7)
- Permittees are allowed to use the 2005 SWWM or "an equivalent manual approved by the department." It is unacceptable to incorporate unidentified guidance documents that do not yet exist, and where there is not opportunity for public review of Ecology's equivalency determination. (P13, P14)

Response to the range of comments:

- See the response to comments on Appendix 1 for use of the WSDOT manual.

- The site planning process is defined in chapters 3 & 4 of Volume 1 of the 2005 Stormwater Management Manual for Western Washington.
- See the response to S5.C.5.b.i, above.

Comments on S5.C.5.b.iii. – Low Impact Development - *See RTC # 1.12 LID*

Comments on S5.C.5.b.iv. - Manual review and approval process

- Manual review and approval process for Phase I – clarify when Ecology will grant a deadline extension. (P2)
- Allowing an extension to the deadline to adopt the manual modifies the terms of the permit, and should not be done in an informal process. Extensions should only be allowed for litigation or administrative appeals of the local manual and ordinances required by this section. (P13, P14)
- It is unclear in (2) as to who and what the written response is for. There is a need for public involvement/participation in this process. (P16)

Response to the range of comments:

- Ecology may grant an extension to the deadline in the case of circumstances beyond the Permittee's control, as described in the permit.
- See the response to S5.C.5.b.i, above.

Comments on S5.C.5.b.v. – Inspection authority

- Inspection authority for new/re development approved under this program. Seattle and Snohomish County argue the McCready decision still limits their ability to establish inspection authority this way. (P2, P6)

Response to the range of comments:

- Comment noted, permittees may still experience limitations to carrying out inspections in every case, however, ordinances may still include this provision. .

Comments on S5.C.5.b.vi. Process or permits, plan review, inspections and enforcement

- Reinsert the sentence calling for use of qualified personnel into every section requiring inspections. (P6)
- "Qualified Personnel" is vaguely defined. Does in-house training constitute professional training? If not what does? Clarify acceptable professional training. (P2, P17)
- The inspection program should be based on a system with established criteria for monitoring (C6)

Response to the range of comments:

- Ecology does not agree that it is necessary to reinsert the sentence calling for qualified personnel into every section requiring inspections.
- A wide range of training constitutes professional training. Ecology will work with permittees to clarify acceptable professional training through permit implementation.
- Ecology does not agree that inspections of new development should include monitoring.

Comments on S5.C.5.b.vi.(1) – Review site plans

- Proposed alternative language: "Review ~~all~~ stormwater site plans submitted to Permittee ….." (P6)

Response to the range of comments:

- Ecology does not agree with the suggested change to delete "all,' however, it is useful that the requirement applies to site plans submitted to the Permittee.

Comments on S5.C.5.b.vi.(2) – Preconstruction inspection

- Inspections prior to clearing and after construction will delay the construction process. (P17)
- Amend draft permit language to require inspection of all permitted development sites involving land disturbing activity that meet the thresholds in S5.C.5.b.i and that have a high potential for sediment transport as determined through plan review generally based on Appendix 7. And add alternative for pre-construction site inspections – inspect all sites prior to issuing final development approval instead of only those that meet criteria in appendix 7. (P6)
- Add more detail on what is expected for the pre-construction inspection in S5.C.5.b.vi.(2). (P7)
- Why does the draft drop the language from the preliminary draft to inspect "all development sites that are hydraulically near a sediment/erosion-sensitive feature"? (P13, P14)

Response to the range of comments:

- See the response to comments on stormwater site plans and stormwater pollution prevention plans.
- The proposed alternative inspection practice is already allowed under the permit.
- The permittee may determine the purpose of the preconstruction inspections.
- Ecology agrees with the proposal to clarify this requirement applies to "permitted" development sites.
- Appendix 7 provides adequate definition of sites that are hydraulically near a sediment/erosion sediment feature.

Comments on S5C.5.b.vi.(3) – Construction inspection

- Change the during construction inspection requirement to say "when notified land disturbing activities have commenced." Add: This inspection may be combined with other inspections provided it is still performed using qualified personnel. (S5C.5.b.vi.(3)) (P6)
- Throughout the permit change the term "ensure" to a term more descriptive of the permittee's task. For example rather than ensure proper installation of erosion control, change to: determine proper installation…. (P6)

Response to the range of comments:

- The permit requires inspection of all permitted development sites involving land disturbing activity during construction to verify proper installation and maintenance of required erosion and sediment controls.
- The permit does not restrict the Permittee's ability to combine this inspection with other inspections.

- Ecology does not agree with the request to change the word ensure in S5.C.5.b.iv.(3) and (4). The purpose of these particular inspections is to ensure proper installation and maintenance of BMPs.

Comments on S5C.5.b.vi.(4) – Completion inspection

- Developing a maintenance plan is costly and unnecessary –should be limited to large projects with permanent facilities. (P17)
- Proposed language change: Inspect all development sites involving land disturbing activity that meet the thresholds in S5.C.5.b.i upon completion of construction...to ~~ensure~~ determine proper installation of… Also, require applicant to complete a maintenance plan and assign responsibility for maintenance. Add: This inspection may be combined with other inspections provided it is still performed using qualified personnel. (S5C.5.b.vi.(4)) (P6)

Response to the range of comments:

- Ecology does not agree with the recommended changes. See earlier responses to similar comments. Also, it is up to the permittee to determine who is responsible for maintenance, this responsibility differs among jurisdictions.

Comments on S5C.5.b.vi.(5) - Inspection compliance

- The requirement to achieve inspection of 95% of all sites is unclear. How will public know 95% rate is achieved? (P13, P14)
- Requiring 3 inspections, and actually inspecting 95% of all sites renders the permit unreasonable from both a manpower and budget standpoint, and constitutes an unfunded state mandate, violating state law. (P2)

Response to the range of comments:

- Ideally the compliance expectation for inspections should be 100%. However, Ecology recognizes that situations may occur that are beyond the permittee's control that make 100% compliance impossible, such as staff illness or vacancies and emergency/disaster response. Ecology has determined that missing 5% of the inspections is acceptable. Compliance or non-compliance with the 95% inspection rate must be documented in the annual report.

Comments on S5C.5.b.vi.(6) - Records

- Permit requires records retention, but does not require records be generated. Should require writing of inspection reports. (P13, P14)
- How long must records be retained? (P7)

Response to the comment:

- Ecology does not agree that the permit should require written inspection reports.
- General condition G22 requires retaining records for 5 years.

Comments on S5.C5.b.vii – Making NOI available

- S5.C5.b.vii. The current NOI is on the Ecology web page, can the permittee refer development project proponents there?

Response to the comment:

- Yes, provided the applicant has access to the internet.

Comments on S5.C5.b.viii - Training

- Amend training requirement to: require that permit provide training designed that ~~all~~ permittee's staff ~~responsible for~~ whose primary job duties are implementing the program……. Follow up training shall be provided as Permittee determines is needed to address changes in procedures… (P6)

Response to the comment:

- Ecology agrees with the suggestion to clarify the wording of this requirement to apply to employees "whose primary job duties" are implementing the program, and to specify that the permittee determines follow up training.

Comment - Proposed addition: S5.C.5.b.ix.

- Move from the Education and Outreach section into this section: the requirement to ensure that training is available or provided as needed for design engineers, contractors, developers and planners.

Response to the comment:

- Ecology does not agree with this change, including the requirement in the Public Education and Outreach Program is adequate.

Comments on S5.C.5: Deadlines - *See RTC 1.61.*

RTC # 3.7 S5.C6. Structural Stormwater Controls

Commenter(s): C1, C5, C6, P1, P2, P3, P4, P5, P6, P7, P9, P10, P11, P13, P14, P16

Comments on C.6.a What types of projects should be included?

- Permit language in S5.C.6.a. should refer to "designated" uses not "beneficial" uses. Define beneficial uses. (P3, P10)
- Add to S5.C.6.a clarification that program is aimed at impacts "caused by the MS4." (P5)
- Replace the second paragraph of S5C6(a) with the following paragraph. *"The program shall consider the construction of projects such as: regional flow control facilities, water quality treatment facilities, and retrofitting of existing stormwater facilities, rights-of-way, or other properties to provide additional water quality and flow control benefits. Permittees may consider habitat acquisition, restoration of forest cover and riparian buffers, and in-stream culvert replacement projects for compliance with this requirement if there is a demonstrable hydrologic or water quality benefit."* (P1)
- Why exclude culvert replacement from the permit? (P2, P4)
- If S5.C.6.a is intended to apply to capital facilities, it should be revised. (P2)
- Clearly define habitat restoration to include stream channel restoration projects. (P5)
- Flow control and habitat requirements are not appropriate to a water quality-based permit. (P6)
- To eliminate confusion with the section 5, controls for new development and redevelopment, suggest modifying this section to apply only to projects that retrofit existing infrastructure for the purpose of improving water quality. (P6)
- Add language allowing the use of "Natural Drainage System"-type projects. (P9)

- Does this program include projects built by developers? (P7)
- Structural controls should include facilities to trap and collect contaminated particulates. (P10)

Response to range of comments:

- Ecology agrees that "beneficial uses" is not clearly defined in this context, and should be changed to "waters of the state."
- Ecology agrees that the permit should clarify that this program is aimed at impacts caused by the MS4.
- Ecology agrees to add clarification on the retrofitting of existing stormwater facilities, rights-of-way, or other properties to provide additional water quality and flow control benefits.
- Projects included under the structural stormwater controls program must prevent or reduce the discharge of pollutants and hydrologic impacts caused by discharges from the MS4. Projects may include new construction, expansion, renovation, or replacement of an existing facility or facilities. In addition to the range of structural BMPs described in the Stormwater Management Manual for Western Washington, there are other non-traditional projects that can reduce the discharge of pollutants, and reduce impacts to waters of the state by protecting or restoring hydrologic capacity. Instream channel restoration and culvert replacement projects do not prevent or reduce the discharge of pollutants or hydrologic impacts of discharges from the MS4 and are not accepted under this permit requirement.
- The permit language does allow the use of "Natural Drainage System"- type projects, these are considered infiltration and dispersion BMPs.
- This program does not include projects built by developers. BMPs constructed in connection with development projects are required under S5.C.5, Controlling Runoff from New Development, Redevelopment and Construction sites. This program requires the construction of projects by the permittee in addition to controls installed to mitigate the effects of development.
- Ecology agrees that project should also include facilities to trap and collect contaminated particulates

Comments on S5.C.6.b.i Define impacts "not adequately controlled"

- Control of impacts "not adequately controlled" by other required actions is vague and should be defined:
  - to include compliance with standards in addition to hydrologic impacts. (C5)
  - so permittee knows when they have met this measure. (P5)
  - to provide criteria and clarify who makes this determination (P13, P14)
- Does Ecology anticipate a standard way that permittees will quantify or describe "impacts not adequately controlled" by the rest of the SWMP? (P5)

Response to range of comments:

- Ecology does not agree that the permit must include a definition of impacts "not adequately controlled" by the other required actions of the SWMP. Large areas of existing development served by the Phase I Permittees' MS4s were developed with any stormwater treatment or flow control BMPs. While the source control,

IDDE and public education requirements of the SWMP may be successful in reducing impacts to water bodies located in these already developed areas, there is no question that retrofitting of structural controls is needed to further reduce impacts. In addition, in areas where new development is occurring, permittees may want to install regional facilities or non-traditional controls to address the acknowledged cumulative effects resulting after individual site controls are applied. Future permit may define specific goals for water bodies that in turn define expectations for stormwater structural controls.

Comments on S5.C.6.b.i The permit should include a performance standard for the structural controls program

- Permit should set clear performance standards rather than allow permittees to set goals. (C5)
- This special condition is unconstitutionally vague as to what is required for compliance with the permit. Condition should be stricken or revised to clarify what is required of permittees. Define terms such as "highest-ranking problems" and timeframes. (P2)
- For next permit term consider measurable standard for reduction of pollutants, for example 1% reduction in TSS. (P3)
- Concerned that program does not support Puget Sound Partnership goals of protecting and significantly restoring the Sound by 2020 because there is no minimum standard for this requirement. One option is to require identification of inadequate systems, prioritization of discharges suspected or known to be impairing water quality and beneficial uses, and completion of a percentage of those projects (perhaps 10%). (P9)
- The permit should include guidance on when structural controls are required. (P10)
- Structural controls should be based on prioritization at the watershed/basin scale, and should demonstrate how the program will ensure compliance with standards. (P13, P14)
- A watershed approach is needed for structural controls that addresses 303(d) listings. (P16)

Response to range of comments:

- In general, Ecology agrees that measurable performance standards would be useful for this program component. While writing this permit Ecology determined that is was not possible, at this time, to set a feasible, measurable performance standard for the structural stormwater control program. Ecology does not agree with the 1% TSS standard proposed by King County, as it would not be possible to measure compliance with any degree of accuracy that would be meaningful. With regard to the proposal to require permittees to identify inadequate systems, prioritize discharges known to be impairing water quality and beneficial uses, and complete perhaps 10% of these projects, it is not possible for a permittee to predict the cost of implementing such a requirement at the time the permit is issued. This would constitute an unknown burden on the permittee, and is not an acceptable permit condition. Stormwater basin/subbasin planning is allowed as an option under this permit to tailor stormwater controls for new

development and redevelopment, this type of planning is a good way to set performance measures for structural controls for a particular basin. Future permit may define specific goals for water bodies that in turn define expectations for stormwater structural controls.

This permit requires that permittees set the goals for their structural stormwater control programs. Permittees are required to describe the planning process and information considered in developing the program, and the public involvement process. This information will be available to the public in the permittees' annual reports.

Comments on S5.C.6.b.iii: Criteria for measuring and reporting effectiveness of structural controls

- Delete the sentence in S5C6(b)(iii) that requires information on planned monitoring or evaluation of individual projects. Monitoring is a separate section of the permit. (P1)
- The information requested for individual projects is only appropriate for large projects, not quick response-type projects. Require this information for programs as a whole, not each small project. (C1)
- Permittees will need to collect data to support the structural stormwater control program. Consider adding requirement that permittee shall collect water quality, biological and hydrologic data to support this program. (P5)
- Ecology should specify methods for estimating load reductions and other benefits. (P5)
- Will Ecology establish criteria to measure the project's ability to control stormwater impacts not adequately controlled by other actions in the SWMP? (P5)
- Amend S5.C.6.b.iii as follows: For planned and individual projects, or programs of projects, provide a description of the expected benefits including reductions in pollutant loading, flow reductions, habitat enhancement or other benefits. (P7)

Response to range of comments:

- Ecology does not agree with the suggestion to delete the reporting on planned monitoring or evaluation of individual projects. If permittees monitor projects, it is appropriate that they report this information. This program component does not create an additional monitoring requirement.
- Ecology agrees that the information requested should apply to planned individual projects and to programs of projects, not each small project.
- At this time Ecology is not able to establish methods for estimating load reductions and other benefits. We do not intend to require additional monitoring through this requirement, however, as stated above, if permittees choose to monitor projects, that information must be reported. Ecology will work with permittees during permit implementation to assist with methods to estimate load reductions and other benefits.

Comments on S5.C.6. Other comments

- This section would benefit from clear adaptive management system. (C5)

- Clarify that structural stormwater controls will only begin to address impacts. (P5)
- Add: "It is understood that mitigating all existing development to current standards is not feasible and that stormwater impacts will be prioritized and addressed as funding becomes available." (P7)

Response to range of comments:

- See the response to comments on S8. Monitoring, for the response on adaptive management.
- The Fact Sheet to the permit includes the clarification that Ecology understands it is not possible to provide structural controls to mitigate the impacts of runoff from all existing development, and permittees will prioritize projects, and address highest-ranked projects – as determined by the permittee.

Comments on S5.C.6. Structural Stormwater Controls - deadlines

- 18 months is too long, deadline should be 12 months. (P13, P14)
- Timelines for reporting on information about individual projects should be stated. (P13, P14)

Response to range of comments:

- Ecology agrees that the 18 month deadline in S5.C.b.i conflicts with the requirement to submit a description of the structural stormwater control program in S5.C.6.b.ii.
- The deadline for reporting on each individual project will depend on the completion dates for each project, and this will be included in the description of the structural stormwater control program in the annual report due in 2008.

RTC # 3.8 S5.C.7 Source Control Program

Commenter(s): C5, C7, P1, P2, P3, P4, P5, P6, P7, P9, P13, P14

Comments S5.C.7.a Source Control

- Program is vague. How are determinations made about the use of structural BMPs? (C5, P4)
- This section relies on BMPs in the manual as the sole determination of whether BMPs are meeting standards. These BMPs have not gone through formal field testing and should be tested on a site-specific basis. More field testing of BMPs is needed. (C5)
- Amend the manual to remove the "operational BMP" designation from any BMPs that require construction or physical site alterations. (P1)
- Define existing land uses to mean properties zoned for commercial, industrial and multifamily residential purposes. (P1, P7)
- Add residential properties. (P3)
- Concerned with the new enforcement powers, this may be a violation of vesting/grandfathered uses laws. Will provide a legal opinion at a later time. (P4)
- Estimate this program will require 5 additional inspectors at a cost of $500,000. (P4)
- The language calling for the reduction of pollutants associated with the application of pesticides, herbicides and fertilizer is vague, under the control of the federal government, and should be eliminated. Instead require education and

application in a manner consistent with labeling and state Dept. of Agriculture licensing. (P4, P7)

- Permittees already adopted the 1992 manual, the effort to upgrade to the 2005 manual is probably not worth the slightly upgraded standard. A higher priority is better implementation of the existing standard. (P5)
- Add: program shall include the following elements within the limits of local, state and federal law. (P6)
- The requirement to impose structural BMPs in S5.C7.a.i. should be clearly bounded by the phrase "to the extent allowed by state or federal law." (P6)
- S5.C.7.a.iii is unreasonable and expects that municipalities can force all dischargers to obtain coverage under an NPDES permit issued by Ecology. (P2)
- Proposed language change for S5.C.7.a.iii.:
  iii. Application and enforcement of local ordinances at applicable sites, including sites that are also covered by other stormwater permits issued by Ecology. Permittees that are in compliance with the terms of this permit shall not be held liable by Ecology for water quality standard violations or receiving water impacts caused by industries and other permittees covered, or which should be covered under an NPDES permit issued by Ecology. (P6)
- Permittees do not have the legal authority to inspect and regulate direct dischargers and industrial NPDES permitted facilities. Ecology responsibilities should not be transferred to permittees via the permit. (P7)
- How will Ecology or the public know whether a violation of water quality standards is caused by an industry under an NPDES permit or failure in the municipality's SWMP? (P13, P14)

Response to the range of comments:

- Determination about the application of structural BMPs are made by permittees in the course of enforcing local requirements. Structural source control BMPs are required when operational source control BMPs are determined not to be effective, resulting in an illicit discharge or causing or contributing to a violation of surface water, ground water or sediment management standards because of inadequate stormwater controls.
- Ecology agrees that the source control BMPs need further field testing. Ecology has a program to do this through monitoring in the Industrial Stormwater General Permit. Ecology is not requiring municipalities to implement a parallel monitoring program for pollutant generating sources that discharge into their MS4s in this permit.
- Ecology does not agree with the request to remove the "operational BMP" designation from any BMPs that require construction or physical site alterations. These BMPs may involve very minor site alterations or construction, not enough to restrict their use by labeling them structural BMPs.
- The land uses subject to the requirements of this program component are defined in Appendix 8. This is clarified in S5.C.7.b.i. Ecology does not agree that the designation should be based on underlying zoning, the actual use is the basis for the need to control pollutants.

- Multifamily residences are included in Appendix 8. Ecology does not agree that single-family residential development should be included in the source control program.
- Ecology does not agree that the source control program is a potential violation of grandfathered uses or vesting laws. The prohibition on the discharge of polluting matter in RCW 90.48.080 applies to any person.
- Ecology does not agree that language calling for the reduction of pollutants associated with the application of pesticides, herbicides and fertilizer is vague, under the control of the federal government, and should be eliminated. Permittees are responsible for controlling discharges coming into their MS4, and pesticides have been measured in receiving waters in areas covered under this permit. Permittees may go beyond relying on licensing requirements to consider application practices in their source control inspection program.
- Where a permittee is already implementing the source control BMPs in the 1992 manual, the level of effort to upgrade to the 2005 manual should be minimal. Without changing the permit, the permittee should be able to place a higher priority on better implementation of the source control program.
- Ecology agrees that the entire SWMP should be subject to the limits of state and federal law. Ecology does not think it is necessary to include this limitation in every component of the SWMP.
- Ecology does not agree that the permit expects permittees to force all discharges to obtain coverage under an NPDES permit, nor does it transfer Ecology's responsibility to enforce NPDES permits to permittees. The permit sets a clear expectation that permittees enforce the source control inspection program at all pollutant generating sites that discharge into the MS4, including those that also have coverage under another NPDES permit, such as the Industrial Stormwater NPDES general permit. Permittees do have the authority to enforce their own ordinances or other enforceable requirements. Ecology agrees that the permit should clarify that the source control program applies to pollutant generating sources that discharge to the MS4. The determination of whether a violation of water quality standards is caused by an industry under an NPDES permit or failure in the municipality's SWMP will have to be made through case-by-case investigations.
- Ecology agrees that the language in S5.C.7.a.iii should include receiving water impacts, all other permittees and sites that should have NPDES permit coverage.

<u>Comments on S5.C.7.b.i. Source control ordinance</u>

- To clarify when structural BMPs will be required amend S5.C.7.b.i. – page 13, line 12, to read as follows: "Structural source control BMPs shall be required for pollutant generating sources if operation source control BMPs do not prevent illicit discharges or violations of surface water, ground water, or sediment quality standards." (P1, P7)
- Amend S5.C.7.b.i to clarify that the requirements of this subsection are met by following the 2005 manual, or Ecology approved equivalent. Proposed language: <u>The requirements of this subsection are met by</u> Permittees who choose to use the source control BMPs in Volume IV of the 2005 Stormwater Management

Manual for Western Washington, or an equivalent manual approved by Ecology, who may cite this choice as their sole documentation to meet this requirement. In regard to an equivalent manual, more stringent requirements may be used, and/or certain requirements may be tailored to local circumstances through the use of basin plans or other similar water quality and quantity planning efforts. Such local requirements and thresholds must provide similarly protective levels of pollutant control as compared with Volume IV. (P6)

- Amend to say enforcement is used as determined necessary by the permittee. (P6)
- How, when, and by whom is the determination made that operational source control BMPs are not effective? (P13, P14)

Response to range of comments:

- Ecology agrees it is appropriate to amend the requirement to clarify it is met by using the 2005 Ecology manual or an approved, functionally equivalent manual.
- Ecology agrees that the proposed explanation of when structural BMPs are required is easier to understand.
- Permittees are responsible for determining when operational source control BMPs are not effective. In addition, Ecology agrees that the permit may clarify that enforcement is used as determined necessary by permittees and in accordance with the provisions of S5.C.7.b.iv.

Comments on S5.C.7.b.ii Source control site identification

- Amend S5.C.7.b.ii.(1):
  (1) Estimating the inventory of land uses/businesses using the categories of land uses and businesses in Appendix 8. The permittee shall update the inventory as new businesses are identified and business ownership/management and responsibilities change. (P3)
- Something more than complaint-based response is needed for mobile or home-based businesses. Add to the education program. (P4)
- Proposed alternative for site identification: taxlot characteristics tabulated for assessing stormwater fees. (P5)
- Proposed option for site identification: a canvassing door-to-door approach to develop this inventory. (P7)
- May be more appropriate to conduct inventory and inspection simultaneously. Proposed alternative for site identification: Manual 11: Unified Subwatershed and Site Reconnaissance: A User's Manual , from the Center for Watershed Protection. (P5)
- Are the 2 enumerated items in S5.C.7.b.ii exclusive requirements, or minimum measures?

Response to range of comments:

- Ecology agrees that the permit should clarify that updates to the inventory shall be made as new businesses are identified and ownership/management responsibilities change.
- Ecology agrees that mobile or home-based business should be addressed in the education program

- The permit does not specify methods for identifying sites which are potentially pollutant generating. Ecology believes permittees should be allowed flexibility to estimate the inventory of sites using a method appropriate for their jurisdiction. The methods proposed in the comments seem reasonable. No change to the permit is needed.
- The 2 enumerated items in S5.C.7.b.ii are minimum measures.

Comments on S5.C.7.b.iii Source control audit/inspection program

- Amend S5.C.7.b.iii.(1):
  All identified sites with a business address shall be provided, by mail, telephone, or in person, with information about activities that may generate pollutants and the source control requirements applicable to those activities. This information may be provided all at once or spread out over the last three years of the permit term to allow for some tailoring and distribution of the information during site inspections. Businesses may self-certify compliance with the source control requirements at the discretion of the permittee. The permittee shall inspect 20% of these sites annually to assure BMP effectiveness and compliance with source control requirements. The permittee may select which sites to inspect each year and is not required to inspect 100% of sites over a 5-year period. Sites may be prioritized for inspection based on their land use category, potential for pollution generation, proximity to receiving waters, or to address an identified pollution problem within a specific geographic area or subbasin. (P3)
- The permittee can inspect and enforce, but cannot ensure the actions of others. (P6)
- On-site inspections work better than self-audits because we can prioritize sites that need more frequent checks. (P4)
- Permittees may not be able to inspect 100% of sites. (P2, P5)
- Contact each site through a site visit and attempt an inspection. (P5)
- Recommend requiring all multi-family, commercial, industrial and governments sites be inspected at least once during the permit term. (P9, P13, P14)

Response to range of comments:

- Ecology agrees with the proposed language changes from King County that allow greater flexibility for providing businesses with information; clarify that allowing self-certification is at the discretion of the permittee; and clarifying that permittees are not expected to inspect 100% of sites over a 5-year period; and providing prioritization criteria. These changes address the majority of the comments on this section.
- Ecology does not agree that all multi-family, commercial, industrial and governments sites be inspected at least once during the permit term. It is not possible to develop a list of sites with complete accuracy. A 100% inspection standard would be impossible to meet for that reason alone. In addition, there is such extreme variability in the range of potentially pollutant generating sites that it makes more sense to prioritize sites for more comprehensive inspections with follow-up enforcement if needed.

Comments on S5.C.7.b.iv. Source control progressive enforcement policy

- Delete the language requiring a "good faith effort" of progressive enforcement before referring violations to Ecology. "Good faith effort" is not clearly defined. Referral without a "good faith effort" should not be a permit violation. (P1)
- Define extent of "consistent effort." (P7)
- Several proposed detailed wording changes. (P6)
- How long do permittees need to keep records? (P7)
- Follow up inspections should be required within 30 days. (P13, P14)

Response to range of comments:

- Ecology agrees that it is appropriate to change the language requiring a "good faith effort" to a "documented effort," consistent with the IDDE program.
- Ecology agrees that there are situations where violations require a direct referral to Ecology, and this should not be a permit violation. A permittee should contact Ecology immediately upon discovering a source control violation that presents a severe threat to human health or the environment.
- Agree with requested amendment to S5.C.7.b.iv to require enforcement to require facilities to come into compliance.
- Agree with requested amendment to S5.C.7.b.iv.(1) to change all necessary BMPs to the required BMPs.
- Ecology does not agree with requested amendment to S5.C.7.b.iv.(3) to require implementing practices to maintain records. The records must be maintained.
- Agree with requested amendment to S5.C.7.b.iv.(3) to add operator.
- General Condition G22 requires records be kept for 5 years.
- Ecology does not agree that follow up inspections should be required within 30 days. Follow up enforcement can take different forms, not just inspections, Also, required actions may take longer than 30 days to complete and an inspection should be scheduled accordingly.

Comments on S5.C.7.b.v Source control training

- Permittee can provide training, but not ensure that staff are trained. (P6)
- Amend to require training for staff whose primary job duties are implementing the source control program.

Response to range of comments:

- Ecology does not agree that permittees must only provide training. Permittees must evaluate the competence of staff to perform their job, this means ensuring staff are trained.
- Agree with requested change to staff whose primary job duties are implementing the source control program.

Comments on S5.C.7.deadlines

- Considering that source control regulatory programs are in place under the current phase I permits, provide some flexibility on the schedule for updating code and BMP manuals. (P5)
- Extend deadline to 24 months for ordinance adoption. Extend deadline to 18 months to submit draft ordinance and source control BMPs to Ecology for review. (P6)

- 12 months is too long to establish a program for site identification, deadline should be 90 days. (P13, P14)
- Why is there no deadline for actual identification of sites? (P13, P14)
- 24 months to implement an audit/inspection program is too long, deadline should be 6 months. (P13, P14)
- 24 months for implementing a progressive enforcement policy is too long and should be shortened. (P13, P14)
- 24 months for staff training is too long, should be 12 months to be consistent with ordinance adoption. (P13, P14)

Response to comments:

- See the response to comments on the deadline for manual adoption.
- The permit does not include a deadline for actual identification of sites since businesses come and go, and this is not a static list.

RTC # 3.9 S5.C.8. Illicit Discharge Detection and Elimination Program

Commenter(s): C1, P1, P2, P3, P4, P5, P6, P7, P13, P14, P16

Comments on S5.C.8.a and b.i - IDDE general comments:

- Add a statement of overall IDDE compliance if actions in the component are being implemented as a program. (P5)
- Allow more time for developing procedures for addressing pollutants from interconnected systems (P5)
- Delete requirement for procedures for addressing pollutants entering the MS4 from an interconnected, adjoining MS4 – this is inappropriate for continuing obligations as of effective date of permit. (P6)

Response to range of comments:

- Ecology agrees that overall compliance with the IDDE requirements is met if the actions are being implemented as a program, however, no change to the permit is needed.
- See the response on IDDE deadlines, below.
- Ecology does not agree that the procedures for addressing pollutants from interconnected MS4s should be deleted, however, additional time has been granted to meet this requirement.

Comments on S5.C.8.b.ii - Prohibiting non-stormwater discharges

- Delete "to the maximum extent allowable," and move language from S5.C.8.b.ii.(5) to paragraph at S5.C.8.b.ii. (P7)
- Amend S5.C.8.b.ii.(2) as follows: The regulatory mechanism in S5.C.8.b.ii above, ~~shall~~ need not prohibit the following categories of non-stormwater discharges if (1) local regulatory prohibitions condition the discharges as stated below, or (2) where a Permittee program is mentioned below rather than a condition, the Permittee has such a program developed on the timeline required elsewhere in the permit: ~~unless the following conditions are met:~~ (P7)

Response to range of comments:

See RTC # 1.21 Non-stormwater discharges

Comments on S5.C.8.b.iii and iv - IDDE training:

- Allow permittee to determine who are primary staff that require training, and what follow up training is necessary. (P6)
- The non-IDDE staff training is so broad, how does the permittee know that this requirement is met? (P5)
- Limit the training to those doing maintenance of roads, ditches and storm sewers, and, if under the control of the permittee, include restaurant inspectors and animal control officers. (P5)

Response to range of comments:

- Permittees are responsible for providing training for their staff so that staff are staff are adequately trained to carry out the requirements of the permit.

Comments on S5.C.8.b.vi - Field Screening:

Field screening methods

- The field screening guidance manual inappropriately relies on an inventory of outfalls – most outfalls are on private property and are not part of the MS4, and stream reconnaissance requires permission from private property owners which is cost prohibitive and not likely to yield permission for an entire stream corridor. (C1, P4)
- Delete reference to IDDE manual from the Center for Watershed protection, and for counties require reconnaissance inventory for conveyance systems (not outfalls). (P3)
- Amend field screen requirement to allow IDDE manual OR the outfall screening methods and level of effort currently employed under a Phase I Municipal stormwater management program approved by ecology. Only require outfall reconnaissance if permittee opts to use the IDDE manual. (P1, P4)
- IDDE manual is misguided because outfall is the point where stormwater flows from county right-of-way onto private property; and because the dry-weather screening method based on the EPA regs is effective. (P1)
- The IDDE manual outfall reconnaissance inventory (ORI) should be adapted to the needs of the permittee. It is not possible to survey by walking streams because vegetation is so dense. Can only do this in the winter when some vegetation has no leaves. (P5)
- Allow reliance on responding to complaints for controlling illicit discharges – field screening more applicable where discharges occur on a more frequent basis. (P6, P7)

Where and how much to screen

- The focus on urban areas for screening of illicit discharges is misguided, as many of the illicit connections found in King County have been in rural areas. (C1)
- Permit could specify that outfall screening should address known outfalls for some amount of stream miles within the UGA before annual report for final year of permit. (P5)
- Permit should allow screening in non-urban areas where permittee has determined it to be a priority. For example where a capital plan is being developed or there is a TMDL. (P5)

- Allow permittees to prioritize and complete reconnaissance for 60% (for example) of the outfalls within the 5 year permit term. (P6)
- What is the justification for requiring counties to complete the reconnaissance for only half of the streams and shorelines in urban/higher density rural subbasins? (P13, P14)
- One half of streams and shorelines is not enough. This is building on current permit and should be done. (P16)

Response to range of comments

- Ecology agrees with comments calling for allowing the use of field screening methods approved under the earlier Phase I municipal stormwater NPDES permit, provided that methods must not be limited to complaint response and source control inspections. On-going field screening is necessary to adequately identify illicit connections. Source control and complaint response programs may identify a substantial number of illicit connections, but illicit connections resulting from internal plumbing cross connections cannot be identified this way. Significant illicit connections in the City of Seattle could not have been identified without actual screening of the outfall or conveyance. Based on this experience Ecology will require field screening to identify illicit connections, in addition to source control inspections and complaint response.
- Ecology agrees with comments that permittees should be allowed to prioritize areas for screening.
- Ecology agrees with the comments to focus on screening outfalls and conveyances instead of conducting reconnaissance along streams and shorelines.
- Ecology agrees that Counties should also look for illicit connections in rural areas.
- Ecology does not agree that the permit should require field screening for all outfalls and conveyances during the permit term. There are thousands of outfalls and hundred of miles of conveyances in each Phase I municipality, it is not possible to screen all conveyances and it is appropriate to prioritize this work.

Comments on S5.C.8.b.vii - Response to illicit connections:

- Delete requirement to determine the volume of an illicit discharge, this requires flow monitoring. (P1)
- Ambiguous – should be clarified to state the discharger is responsible (not permittee) (P2)
- May not be able to ensure termination within 6 months. Extend the deadline or allow some flexibility for limited circumstances. (P2)
- Add: The permittee shall document their enforcement efforts, and *attempt* to meet 6 months termination deadline. (P3)
- Obvious and suspected illicit discharges should be differentiated for response requirements. Obvious illicit discharges should be addressed with immediate identification and referral to the proper enforcement agency. An alternative option is to reference the CWP guidance manual as guidance for follow up

response for suspected illicit connections/discharges. The manual included approaches to prioritize further investigation. (P5)
- Define extent of "consistent effort" of progressive enforcement. (P7)
- Response time is totally inadequate. Should say must investigate as soon as possible and not later than 7 days. (P13, P14)
- Require use of enforcement authority to *ensure* removal of illicit connection. (P13, P14)
- How long should permittees undertake a good faith effort before referring Ecology? (P13, P14)
- There does not seem to be a requirement for reporting this requirement. Could this be incorporated into the annual report? (P16)

Response to the range of comments

- Ecology agrees that measuring the volume of an illicit discharge is not necessary.
- Ecology agrees that the person causing the illicit discharge is responsible, however, the permittee is responsible for controlling discharges into their MS4.
- The requirement to terminate illicit connections requires that permittees use their enforcement authority and work with the property owner *in a documented effort* to eliminate the connection. As long as the permittees can document the effort made to eliminate the connection in that time frame they are in compliance with this requirement.
- Ecology agrees that obvious illicit connections and suspected illicit discharges should be addressed differently. The CWP IDDE guidance manual calls for eliminating obvious illicit connections with in 30 days. Suspected illicit discharges, including dumping or spills, may take longer to eliminate.
- Ecology agrees that the permit should require that all illicit connections be eliminated.
- The length of time before a permittee may refer an enforcement issue to Ecology is decided on a case-by-case basis. Permittees should consult with Ecology regional office staff as needed. Ecology agrees that there are situations that require immediate notification of Ecology.

Comments on S5.C.8.b.viii - Spill Response

- Change the requirement to allow the permittee to participate with other municipalities in an emergency response network. For example Snohomish County does not operate a fire department or other department trained in hazardous materials or spill response, current language requires the County to be the response agency. (P1)
- This provision requires Permittees to ensure all types of illicit discharges are prohibited. (P2)
    a. Such a sweeping regulatory requirement may go beyond the legal authority of local governments and may also cover discharges that are not covered under this permit. This section should be revised to more narrowly list the set of stormwater discharges that permittees are required to regulate.

b. What constitutes "appropriate" control measures? Ecology should create a list of appropriate measures before the permit is effective or remove or modify this condition.

- Except for minor spills associated with roads, it is our understanding that Ecology is the lead agency for spill clean up on terrestrial areas. We will not expand spill clean-up capability beyond what we have now, as it is an extremely expensive endeavor, and not suitable for local governments to take over from Ecology. Our Road Maintenance department has negotiated procedures with the appropriate Ecology Department for spills, and it is attached for your reference. We will respond and provide assistance in locating storm drains, informing Drainage districts as needed, and inspect for adequacy of clean-up.

(P4)

- Ecology is responsible for large spills. Don't transfer responsibility to the permittees through the permit. The municipality should be able to handle small spills, less than 5 gallons, in the right-of-way. (P7)
- Local public works agencies cannot be expected to handle chemical spills or unknown products. Their role is long defined in city/county/state emergency plans as a support organization. Cleanup is generally the responsibility of the spiller and/or funded and oversight provided by Ecology.(P7)
- This should be two separate requirements. One should be that the permittee describe their ability to respond to spills, and having agreements in place with local and regional spill responders. (P5)
- The other relates to investigating reports of potential illicit discharges that could include spills, which might be better placed under S5.C.8.b.vii, above. (P5)
- Regarding the 7 day investigation requirement, will a permittee be out of compliance if it takes an average of 8 days to investigate? Are these working days or calendar days? (P5)
- Delete requirement for procedures to "prevent" spills – can only respond. (P6)
- Delete the 7 day requirement to investigate, because permittees don't always receive prompt notice, particularly of spill that occur during non-business hours. Clarify that permittee should judge what is urgent or severe, or an emergency. Requirement to act must be based on permittee's knowledge and awareness of a problem. (P6)
- What exactly does "immediately respond to problems/violations judged to be urgent, severe, or an emergency" mean? Does that mean 24 hours? 12 hours? An hour? And what are the criteria to judge whether a problem is urgent? (P13, P14)

<u>Response to range of comments</u>

- Ecology agrees that the permittee may participate in an emergency response program to meet this requirement.
- Section 402(p) of the Clean Water Act states that permits for municipal stormwater must contain a requirement to effectively prohibit non-stormwater

discharges. The IDDE program is designed to implement this sweeping requirement in a practical a manner as possible.

- Ecology does not intend to transfer responsibility for responding to spills of oil or hazardous materials to permittees. Permittees are expected to coordinate with Ecology's spill response program and directly address small spills not addressed by Ecology. Information on how to report a spill is at: http://www.ecy.wa.gov/programs/spills/other/reportaspill.htm
- Ecology generally agrees that there are 2 aspects to this part of the permit. One is having the ability to respond to spills, including having agreement sin place with other spill responders. The other is investigating potential illicit discharges, which may result from spills or dumping.
- Ecology agrees that this program need not include preventing spills. This addressed in this permit through the source control program in S5.C.7.

Comments on S5.C.8.b.ix - IDDE Tracking and record keeping

- How long should records be kept? (P7)
- There does not appear to be a mechanism reporting this requirement, could this be included in the annual report? (P16)

Response to range of comments

- General condition G22 calls for retaining records for 5 years.
- Tracking and reporting for this requirements is called for in S5.C.8.b.ix.

Comments on S5.C.8. IDDE deadlines

- How does the field screening implementation schedule comply with 402(p)(4) of the CWA? (P13, P14)
- Allow more time for developing procedures for addressing pollutants from interconnected systems (P5)
- The training deadlines are confusing and should be clarified. (P2)
- The training deadlines are too long since IDDE is a requirement of the current permit. Initial training should be done within 12 months. (P13, P14)
- A phone listing specifically for water quality complaint is not a requirement of the current Clark County permit – please extend deadline beyond effective date of permit. (P5)

Response to range of comments

- Compliance with the field screening requirements is based on the presence of a program to do field screening that continues field screening that started under the previous Phase I municipal stormwater NPDES permit. Field screening is an on-going need with no defined stopping point because illicit connections and discharges can occur for many reasons.
- Ecology agrees that permittees may need more time to develop procedures to address interconnected systems. This was an expectation of the previous permits, however, the requirement was not explicitly stated. EPA regulations for Phase I clearly identify the need to address interconnected systems. Ecology will allow 2 years to develop internal procedures to address interconnected systems, consistent with the deadline for coordination in S5.C.3.b.ii.

- The training deadlines apply to two groups of employees, the first is the group of employees directly responsible for implementing the IDDE program. !8 months is an appropriate deadline for this group since the Permittees IDDE program may change in response to the requirements in S5.C.8.b.ii. The second group are other employees that may encounter illicit discharges in the course of doing other jobs, the deadline for this group is later.
- Ecology agrees that a compliant response line is not a part of the previous Clark County permit. Ecology will allow 6 months for Clark County to establish a complaint response telephone number.

RTC # 3.10 S5.C.9. Operation and Maintenance Program

Commenter(s): C1, C5, P1, P2, P3, P4, P5, P6, P7, P9, P13, P14, P16

Comments on S5.C.9.a - O&M

- Amend second sentence of S5.C.7.a as follows: Within the limits of state and federal law the program shall include elements aimed at: (P6)

Response to comment:

- Ecology does not agree. The program must include the items listed.

Comments on S5.C.9.b.i - Maintenance standards

- Support requiring maintenance standards that are as stringent as those in the 2005 manual. (P9)
- Require Ecology review and approval of maintenance standards. (P6)
- Do not prescribe compliance expectations for maintenance standards. (P6)
- Extend timeframe for compliance expectations. (P4, P5)
- Delete explanation behind compliance expectations for maintenance standards, but retain the bottom line compliance expectations. (P7)
- Change compliance expectations to 12 months for typical maintenance, instead of 6 months for typical maintenance and 9 months for revegetation. (P1)
- Add flexibility to the compliance expectations, allowing longer timeframes for where there are documented circumstances beyond the permittee's control that prevent meeting the timeframes in the permit. Examples of such circumstances include denial or delay of access by property owners, denial or delay of necessary permit approvals, unexpected emergency work or disaster, abnormally high amount of maintenance work, and unexpected extreme weather or field conditions. Permittee must document circumstances. (P3)
- Permittee's existing maintenance standards are less detailed in some aspects but are probably equivalent to the 2005 manual. Therefore, updating maintenance standards should not be a high priority. (P5)

Response to the range of comments:

- Review and approval of maintenance standards is not necessary. The standards in the Manual are clear. Adding Ecology review will only delay implementation.
- Ecology agrees to extend the compliance expectation to 1 year for typical maintenance of wetpool facilities and retention/detention ponds. Ecology agrees that for these types of facilities the original 6 month deadline did not allow adequate timing between winter or spring inspections and summer or fall

maintenance work, and could conflict with permitting requirements such as HPAs that may require delayed maintenance until mid-June or July.
- Ecology agrees that it is reasonable to allow some flexibility in the compliance expectations for the maintenance standards where there are documented circumstances beyond the Permittee's control.
- If a Permittee is already meeting the permit requirement then no change to the existing maintenance standards is required.

Comments on S5.C.9.b.ii - Maintenance of privately owned facilities

- Support the permit requirement to inspect and require maintenance of facilities regulated by the permittee. (P13, P14)
- Are permittees being held to actions that are the responsibility of homeowner's associations? (P4)
- Narrow definition of *stormwater facilities regulated by the permittee* to only include facilities known to the permittee, inventoried, located in the geographical area of the Phase I's MS4, and over which the permittee has actual regulatory authority. (P6, P7)
- Change S5.C.9.b.ii.(2) and (3) to limit the inspection and maintenance program to those facilities that the permittee can legally enter the property. Should be limited to facilities that have inspection and maintenance easements. (P1, P2, P4, P5)
- Clarify that facilities located at businesses and in private roads are included. (P7)
- Do not require annual inspections of privately-owned stormwater facilities, this is a significant increase in level of effort. Instead allow permittee to set inspection frequency. (P6)
- Does this requirement include every private rain garden, soil amendment and green roof? Does this include manholes? (P6, P7)
- Revise S5.C.9.b.ii to include only LID systems that are in rights-of-way of the permittee, or built in separate tracts with easements. (P1)
- Reduce compliance level for meeting the inspection requirement from 95% to 80%. (P6, P7)
- What is Ecology's basis for the 95% compliance level for inspections? (P2)
- The requirement to achieve inspection of 95% of all sites is unclear. How will public know 95% rate is achieved? (P13, P14)
- Only require cleaning of catch basins if they are part of the inspected treatment or flow control system. (P6)
- Do not include requirements that affect other sections of the SWMP. (This comment is in reference to noting catch basins through IDDE or source control inspection programs. (P6)
- Delete catch basins from S5.C.9.b.ii.(1). This is the provision requiring permittees to evaluate and if necessary update ordinances requiring maintenance of facilities regulated by the permittee. (P1)
- Change S5.C.9b.ii to apply only to systems that were designed and built to the standards of the 1992 Ecology Stormwater Manual. (P1)

- S5.C.9.b.ii.(4) is unclear. Are permittees required to have inspected all stormwater facilities at new residential construction 21/2 years after the effective date of the permit? (P13, P14)

Response to the range of comments:

- This permit holds Permittees accountable for discharges from their MS4. To comply with this permit, Permittees are responsible for controlling discharges coming into their MS4, which includes maintenance of privately owned stormwater treatment and flow control BMPs. Stormwater BMPs require maintenance to continue performing their intended treatment and flow control functions. The permit does not require permittees to conduct the actual maintenance of these BMPs, but to put controls in place to require that maintenance is done as needed. Permittees are not held to actions that are the responsibility of homeowner's associations under this permit, they are held to actions necessary to control the discharge of pollutants into the MS4 to the maximum extent practicable.
- Ecology agrees that the definition of *stormwater facilities regulated by the permittee* should be limited to BMPS located within the geographical area of the Phase I's MS4, and should clearly include businesses and private roads.
- Ecology agrees that the inspection program should be limited to facilities, including LID facilities, where the permittee can legally enter the property, provided the permittee seeks access to all the types of facilities listed in Ecology's Stormwater Management Manual for Western Washington..
- The permit initially requires annual inspections, however, S5.C.9.b.ii.(3) and (4) allows permittees to change the inspection frequency based on actual maintenance need. Ecology does not agree that permittees should be allowed to set inspection frequencies without basis on maintenance records.
- Ideally the compliance expectation for inspection and maintenance of stormwater BMPs should be 100%. However, Ecology recognizes that situations may occur that are beyond the permittee's control that make 100% compliance impossible, such as staff illness or vacancies and emergency/disaster response. Ecology has determined that missing 5% of the inspections is acceptable. Compliance or non-compliance with the 95% inspection rate must be documented in the annual report.
- Ecology agrees that requiring annual inspection of privately owned catch basins is unreasonable. The ordinance or other enforceable documents called for in S5.C.9.b.ii must establish the authority to require cleaning of catch basins. The permit does not require annual inspection of privately owned catch basins.
- Ecology agrees that some of the maintenance standards in the 2005 Stormwater Management Manual for Western Washington may not be suitable for existing BMPs that are not built to the design standards in the manual.
- The permit requires that permittees have a program to inspect BMPs every 6 months during the period of heaviest construction. 21/2 years after the effective date of the permit, all stormwater facilities in new residential developments that are undergoing the heaviest period of construction should be inspected.

Comments on S5.C.9.b.iii - Maintenance of facilities operated by the permittee

- Clarify in first sentence of S5.C.9.b.iii.(1) program to *annually* inspect all permanent facilities. (P5)
- Stormwater BMPs to maintain should be identified from a list compiled by the permittee once during the permit term. (P6)
- Does this include manholes? (P7)
- The inspection frequency should be determined by the permittee. (P6)
- Require spot checks after a 25 year storm event, instead of a 10 year event. (P6)
- The schedule in S5.C.9.b.iii.(2) may not be attainable, for example numerous outfalls may be damaged by erosion or slope failures. Allow prioritizing projects. (P5)
- Reduce compliance level for meeting the inspection requirement from 95% to 80% or 90%. (P6, P7)
- What is Ecology's basis for the 95% compliance rate for inspections? (P2)

Response to the range of comments:

- Ecology agrees with clarification to move the word "annually."
- Ecology does not agree that the maintenance program should be limited to a list of facilities compiled only once during the permit term. As new facilities re constructed they must be added to the maintenance program.
- The maintenance program includes permanent stormwater treatment and flow control BMPs. Manholes are included only where they are a part of those facilities.
- Ecology agrees that it may not be possible to meet the maintenance compliance expectations after a major storm event. See the amendment to S5.C.9.b.i, above, to address this situation.
- See the response to S5.C.9.b.ii for the 95% compliance rate for inspections.

Comments on S5.C.9.biv - Catch basins owned or operated by the Permittee

- Clarify inspection of catch basins on a "circuit basis." (P6)
- Appendix 6, Street Waste Disposal, should be deleted. This appendix improperly bootstraps in the permit matters that should be dealt with through enforcement of other authorizations, likely be local government rather than under federal authority. If included, should only be for informational purposes. (P6)
- Change catch basin cleaning requirements to apply only in urban and higher density rural sub-basins, and only to sections of the MS4 where there is no downstream detention or treatment system. (P1)

Response to the range of comments:

- The intent of this provision is to allow the Permittee to inspect selected catchbasins in a stormwater system to determine the condition of other catchbasins in the system, usually located upstream of the selected catch basins. A circuit is a series of catch basins, flowing to either a common outfall or to a connection point in another line.
- Ecology does not agree that Appendix 6, Street Waste Disposal, should be deleted from the permit. This permit regulates discharges from the Permittee's MS4 and reintroduction of decant water into the MS4 from catch basin or other maintenance is fully within the purview of this permit, as is proper management

of waste materials generated by actions required under this permit. This is consistent with all other NPDES permits.

- Ecology does not agree that catch basin cleaning should be restricted to urban and higher density rural sub-basins. There are few catch basins outside or urban areas, and permittees may adjust the inspection frequency for these catch basins in accordance with the permit. Further Ecology does not agree that catch basin maintenance should only be required where there is no downstream detention or treatment system. Many stormwater BMPs benefit greatly from pre-treatment removal of solids, and their function can be severely impaired by the solids that can be removed by catch basins.

Comments on S5.C.9.b. v - Maintenance records

- What is the degree of record keeping required to comply? (P5)

Response to the comment:

- The permit requires maintaining records of inspections and maintenance or repair activities. It will be necessary for Permittees to work with Ecology during permit implementation for more detailed guidance on record-keeping.

Comments on S5.C.9.b. vi - Practices for roads

- Clarify that this section applies in the MS4 geographical area, and to roads owned or operated by the permittee. (P6)
- The list of practices to address should be examples only. (P6)
- The permit should state that permittees implementing the Tri-County Regional Road Maintenance Practices are in full compliance with this section. (P3, P4, P5, P7)
- The permit should either reference or allow the Clark county O&M BMP manual. (P5)

Response to the range of comments:

- The geographical area of coverage for this permit is established in S1 and Ecology does not agree that this section should also define a geographical area of coverage.
- The permit already states that this section applies to roads owned or operated by the permittee.
- Ecology does not agree that the list of practices to address should be examples. Without minimum performance measures there is no clear basis for compliance with this section of the permit.
- Ecology has not listed specific maintenance manuals (such as the Tri-County Regional Road Maintenance Practices or the Clark County O&M BMP Manual) to avoid limiting Permittees flexibility in implementing this requirement. If a Permittee is already meeting the permit requirement by implementing practices to address all the listed activities then no change is required.

Comments on S5.C.9.b.vii - Lands owned by the permittee

- Clarify that this section applies in the MS4 geographical area. (P6)
- The list of practices to address should be examples only. (P6)
- Delete this section entirely and instead require compliance with the manual. (P7)

- Delete requirement to address application of fertilizer, pesticides and herbicides, and replace with requirement to apply consistent with labeling and require that applicators have licenses. (P7)
- Can the permit reference the permittee's existing program manual, code and policies and continue their implementation? (P5)
- Why is IPM required under the permit? Isn't a program to reduce pollutants adequate, with IPM as one tool? (P5)
- Recommend adding language stating that permittees shall use non-toxic alternatives to chemical pesticides and vegetation management whenever practical. (P9)

Response to the range of comments:

- See the responses to the Roads Practices section, above.
- Ecology does not agree with the comment to delete this section and require compliance with the manual. The manual applies to new development and redevelopment. This section requires actions to reduce the discharge of pollutants associated with existing development on lands owned or operated by the permittee.
- Ecology does not agree that the permit should delete the requirement to address the application of fertilizer, pesticides and herbicides and replace with requirement to apply consistent with labeling and require that applicators have licenses. Permittees can go beyond licensing requirements to consider alternatives to using pesticides at all. Ecology requires IPM in the permit because this approach to pollutant reduction has been shown to be effective. Non-toxic alternatives to chemical pesticides and vegetation management are a;ready included in IPM.

Comments on S5.C.9.b. viii - Training

- Add clarifications to the training requirements on who is trained, how they are identified, and on follow up training. (P6)
- Can this requirement be met by taking training prior to implementation of the permit? (P7)
- What is accepted training to meet this requirement? (P7)
- The permit should state that training available through the Tri-County Regional Road Maintenance Program guidelines is deemed to meet this permit requirement. (P3, P5)
- Can Ecology provide examples of successful programs or guidance documents? (P5)

Response to the range of comments:

- Ecology agrees with suggested clarifications on who is trained and how they are identified.
- The training requirement can be met by taking training prior to issuance of this permit. Decisions on acceptable training will be made through permit implementation.

Comments on S5.C.9.b. ix - SWPPPs for maintenance yards, etc.

- Clarify that this section applies in the MS4 geographical area. (P6)

- Add: Locations shall be determined by a list made by the permittee once during the permit term. (P6)
- Clarify definition of heavy equipment maintenance or storage yards. (P6)
- Strongly object to requiring an implementation schedule for structural BMPs in the SWPPP, if the site is not under a development permit action or some sort of compliance action. (P7)
- The permit should provide reasonable deadlines for structural BMPs to be fully implemented. (P13, P14)
- Terms like "periodic" and "visual observation of discharges…to evaluate the effectiveness of BMPs" are vague. (P7)
- This section should be omitted from the permit. (P7)
- Add a reference to the Sand and Gravel general permit. (P5)

Response to the range of comments:

- See the responses to the Roads Practices section, above.
- Ecology does not agree that locations should be determined on a list made once during the permit term. If there are changes in maintenance or storage yard locations during the permit term, new locations should also have SWPPPs.
- Ecology agrees with the changes to the definition of heavy equipment maintenance or storage yards, and agrees Permittees should identify facilities subject to this requirement.
- Ecology does not agree with the objection to requiring an implementation for structural BMPs in the SWPPP, if the site is not under a development permit action or some sort of compliance action. Under this requirement Permittees are granted flexibility to determine the need for structural BMPs and to determine the implementation schedule. With this level of flexibility, Permittees can meet this requirement.
- Ecology agrees that a reference to the Sand and Gravel general permit should be included.

Comments on S5.C.9. deadlines

- Ideally the change to the new O&M standards should begin after all stormwater code revisions to adopt Ecology's 2005 manual are completed. (P5)
- Extend deadline to establish maintenance standards from 12 months to 24 months (S5C.9.b.i and ii.). (P6)
- Extend deadlines for maintenance of facilities regulated by the permittee from 12 months to 24 months. (P6)
- Extend deadline for practices for lands owned or maintained by the permittee from 12 months to 18 months. (P6)
- Most maintenance program timelines are too long, and will not support Puget Sound Partnership goals of recovering the Sound by 2020. (P9)
- Most maintenance program time lines are too long and should be shortened. What are Ecology's justifications for these time lines? How do timelines that are longer than 3 years comply with §402(p)(4) of the Clean Water Act? (P13, P14)

Response to range of comments:

- See the RTC # 1.61 on manual

RTC # 3.11 S5.C.10 Public Education

Commenter(s): C1, C5, P1, P2, P3, P4, P5, P6, P7, P13, P14

Summary of comments:

- This requirement would benefit from a regional approach. (C5, P7)
- The permit should not base compliance on things outside the permittee's control, in this case changes in behavior. (P1, P2, P4, P5, P6)
- This section of the permit is vague. How are permittees expected to measure understanding and adoption of targeted behaviors? (P2)
- It is probably not possible to measure actual changes in behavior. This is an unreliable performance measure. (P5)
- Trying to measure the effectiveness of the public education and outreach program will be very expensive and not helpful. This requirement should be deleted. (P7)
- Can Ecology provide a standard approach for measuring knowledge and behavior changes so comparable data can be gathered. (P5)
- Treat education like other requirements and presume compliance if actions are completed. (P5)
- Change goal of the program to "increase behaviors that reduce or eliminate adverse water quality impacts. (P3)
- Suggest a rewrite to clarify which actually measurable goals are associated with which targeted audience and issue. (P3)
- Move S5.C.10.b.ii.(5), education related to the new development and redevelopment standards, to S5.C.5 (new development). (P3)
- Training licensed professionals is not a local government function. It would be better addressed through continuing education programs at universities or elsewhere. (P5)
- Ecology should provide training on the application of the 2005 manual. (P5)
- Adoption of LID requirements in technical standards should be an alternative to education and outreach. (P3)
- The education program does not include pet waste, which is considered a significant bacteria source. (P5)
- Please reference Clark County's existing school-based program on pesticides and fertilizer use in the permit. (P5)
- Include mobile or home-based businesses in the education program. (P4 – comment on source control program)
- Add to this section: "Meeting this requirement also satisfies the requirement of S8.B.1.a. to evaluate the effectiveness of a targeted action." (P6)
- Education on pesticides, fertilizers and other yard care chemical is not the responsibility of Phase I municipalities and should be deleted from this requirement. (P7)
- Education and outreach should promote understanding of the importance of maintaining forest cover. (P13, P14)

Response to Comments:

- Ecology agrees that the minimum performance measures needed clarification, some broadening and better success measures. Credit will be given where programs that meet the performance measures are in place.

PART IV: RESPONSES TO COMMENTS ON PHASE II WESTERN WA

WESTERN WA PHASE II S5: STORMWATER MANAGEMENT PROGRAM

RTC # 4.1 Coordination among MS4 Operators

Commenter(s): W7, W33, W36, W37
Permit sections: S1.D.2 and S5.A.5
Comments:

- Ecology should clarify coordination needs among MS4 operators within jurisdictions that have stormwater permit coverage

Response to Comment:

- Federal regulations do not require coordination or agreements between Phase II permitted entities in adjoining or shared areas. Ecology encourages but is not requiring coordination among permittees. Adjacent MS4 operators must coordinate to the extent necessary to control what comes into their systems.

RTC # 4.2 Implementation schedule and deadlines

Note: This section also responds to comments on S9, Reporting Requirements
Commenter(s): P13, P14, W7, W9, W30, W39, W40, W42, W47
Permit Section(s): S5.A.1.
Range of Comments:

- Condition S5.A.1. requires permittees to submit their SWMP with the first year annual report and to update the SWMPs annually, but does not apparently require permittees to submit the SWMP updates. Permittees should be required to submit SWMP updates to Ecology with each annual report. (P13, P14)
- The IDD&E timeline (3 years) is shorter than the mapping requirement of 4 years. The IDD&E timeline should be due 180 prior to permit expiration. (W7)
- SWMP deadline for secondary permittees should not wait till the very end of the permit. Some of these entities are quit large and have had large effects on local water quality. (W9, W30, W40)
- Several timelines in the permit are overly long, inconsistent with MEP and AKART and will delay development of stormwater management programs. The timelines that should be shortened to one year are:
    - 4 ½ years to develop and implement a program to detect and address non-stormwater discharges, spills, illicit connections and illegal dumping
    - 3 years to prioritize receiving waters for visual inspection, S5.C.3.c
    - 4 years to complete field assessments of just three high priority water bodies under S5.C.3.c.ii
    - 4 ½ years to distribute appropriate information about the hazards associated with illegal discharges
    - 2 years to list and publicize a hotline for public reporting of spills and other illicit discharges under S5.C.3.d
    - 2.5 years to train field staff whose job it is to identify, investigate, and terminate illicit discharges and connections under S5.C.3.f
    - 3 years to develop an operations and maintenance program with "the ultimate goal of preventing or reducing pollutant runoff from municipal operations."

  - 4 ½ years to identify either one or two outfalls where stormwater sampling could be conducted
  - 4 ½ years to identify two suitable questions and select sites where SWMP effectiveness monitoring will be conducted. The timelines in both provisions are unreasonably long. (W30, W39, W40)
- S5.A.1. allows permittees 4 ½ years to develop and implement the SWMPs. This timeline is far too long, and does not satisfy MEP. Permittees should develop and implement SWMPs within 2 years. (W30, W40)
- The time allowed to adopt ordinances is unrealistic and should be lengthened (W47)
- The reporting period for the first annual report should end on December 2007. (W9)

Responses to Comments:

- Ecology agrees that the IDD&E timeline of 3 years cannot be completed before the mapping of the system is completed, due in year 4. The IDD&E deadline will be changed to 180 days prior to permit expiration.
- Ecology set the SWMP deadline for secondary permittees at the very end of the permit because many of these entities are not anticipating that they will be required to obtain permit coverage. Some of the larger secondary permittees may already have programs in place; however, many of the smaller MS4s will be just beginning to build a SWMP once the permit is issued.
- The extended deadlines are meant to accommodate smaller municipalities who are just beginning to develop the components of their SWMPs.
- Ecology agrees that the end date of the first reporting period should be December 31, 2007. The first annual report is due March 31, 2008.

RTC # 4.3 Cost tracking – See RTC # 1.0

RTC # 4.4 SWMP designed to meet MEP and AKART

Note: see also RTC for S4, Compliance with Standards

Commenter(s): W2, W3, W13, W14, W18, W22, W23, W28, W30, W40

Permit Section(s): S5.B

Range of Comments:

The current language creates a liability

- Insert the underlined text after the first sentence in S5B, "The Stormwater Water Management Program shall be designed to reduce the discharge of pollutants from regulated small MS4s to the MEP, meet state AKART requirements, and protect water quality." Compliance with the permit and implementation of the SWMP is deemed to be compliance with this MEP requirement, state AKART requirement and requirement to protect water quality. (W2, W3, W14, W18, W22)

The current language defines MEP and AKART by meeting S5

- Delete "The Stormwater Water Management Program shall be designed to reduce the discharge of pollutants from regulated small MS4s to the MEP, meet state

AKART requirements, and protect water quality" because this defines MEP and AKART by specific SWMP components and minimum measures. (W13)

The current language is vague

- S5.A. states that SWMPs shall be designed to reduce the discharge of pollutants to the maximum extent practicable and "protect water quality." Other permit terms including this phrase include: S5.B., S5.C.4.a.ii., S6., and S6.C.6.a.vi.. In all cases, the quoted phrase is vague, and should be replaced with "ensure compliance with water quality standards." (W30, W40)

Response to comments:

- Please see RTC #1.22. This permit requires the SWMP to be designed to reduce the pollutants to the maximum extent practicable and to make progress toward compliance with WQS. The permit also requires the SWMP to be modified to address WQS violations to which stormwater is found to contribute. The municipal stormwater permitting program is based on adaptive management. Permittees must judge the effectiveness and appropriateness of the BMPs they have selected and implemented, and make changes where appropriate. Many BMPs that will be selected and implemented by permittees (for example, all of the possible public outreach and education methods) are not "Ecology-approved stormwater management BMPs." Further, many Ecology-approved BMPs will not function effectively under certain climatic or hydrogeologic conditions.

RTC # 4.5 General Comments on SWMP

Commenter(s): W7, W30, W40

Permit Section(s): Permit Section S5.C

Range of Comments:

Clarify the phrase "to the extent allowable under state and federal law"

- The sentence that ends with the phrase "to the extent allowable under federal and state law," here and in S5.C.4 should be clarified. (W7)

Failure to achieve any S5 minimum element should constitute a permit violation

- In its review of EPA's Phase II regulations, the Ninth Circuit Court of Appeals held that municipal stormwater dischargers' stormwater management programs must be reviewed by permitting agencies. *Environmental Defense Center v. EPA*, 344 F.3d. 832, 856 (9th Cir. 2003) ("... stormwater management programs that are designed by regulated parties must, in every instance, be subject to meaningful review by an appropriate regulating entity to ensure that each such program reduces the discharges of pollutants to the maximum extent practicable."). The draft permit provides for no such review. The draft fact sheet explains that Ecology has chosen instead to spell out minimum elements of a stormwater program that should, if followed, meet the MEP standard. Given the lack of Ecology review and approval, the permit should at least explicitly state that any failure to achieve the minimum elements constitutes a permit violation. W30, W40)

Responses to comments:

- The phase is found in the federal regulations (i.e. 40 CFR 122.34 (4) B) and is given to reassure permittees that they are not being asked to do anything outside of their authority.

- See RTC #1.12

RTC # 4.6 Public Outreach and Education

Commenter(s): C1, C5, P1, P2, P3, P4, P5, P6, P7, P9, P13, P14, W3, W7, W9, W12, W13, W14, W17, W18, W19, W22, W24, W30, W39, W40, W42, W44
Permits affected: Phase I and Phase II Western WA
Permit Section(s): Phase I - S5.C.10 and Phase II - S5.C.1
Range of Comments:
Clarification is needed

- King County proposed changes to this section designed to clarify measurable goals associated with which targeted audience and issue. C1, P3
- Language in the current draft is vague. How will success be measured? Municipalities cannot change behaviors. Can Ecology provide examples? This element would benefit from a regional approach. C5, P2, P5, P6, P7, W3, W7, W13, W18, W19, W22, W24, W39, W42
- Modifying behaviors should be a goal not a requirement. W12, W14, W17, W24
- Credit should be given for existing programs. W7

Additional areas of education and outreach should be targeted

- Pet waste should be included. P5
- Outreach should include communication to the community on specific program activities. It should also include proper vehicle maintenance. P9
- Education and outreach programs should promote an understanding of the importance of forest cover. P13, P14
- Phase II municipalities should have to select more than two audiences. W9, W39
- Homeowner associations should regularly inspect their stormwater facilities. W30, W40
- Septic tank maintenance and operation should be included. W44

Responses to Comments:

- Ecology agrees that the minimum performance measures needed clarification, some broadening and better success measures. Credit will be given where programs that meet the performance measures are in place. Phase II permittees will be required to target more audiences.

RTC # 4.7 Public Involvement and Participation

Commenter(s): C1, P3, P7, P11, P16, P17, W4, W13, W14, W22, W27, W39, W44
Permits affected: Phase I and Phase II Western WA
Permit Section(s): Phase I – S5.C.4 and Phase II – S5.C.2
Range of Comments:

- The language requiring Phase I's "develop and begin implementing a process to create opportunities for the public to participate in an advisory role in the decision making processes involving [not just] the development, [but also] implementation and update of the permittee's SWMP" goes beyond present requirements. If existing process, like budget review, are adequate for compliance with this section, the permit should state that. C1, P3, P7, W22
- Six months is not enough time, we need 12 to 18 months. P7

- The permit does not provide for public review and comment on the SWMP. This deficiency should be rectified. P11
- The fact sheet states clearly (page 29, Line 44) that the EPA requires public involvement and participation. The permit in this section only calls for involvement, this is a lower standard. Nowhere in the minimum performance measures is public participation called for. Just requiring the documents to be available on the web site is not enough. Public review of each submittal should be required, with DOE considering the public responses in its own review for adequacy and making it part of the public record. P16, W44
- At a minimum, a land developer and builder representative should be fully involved in the development, implementation, and update of the local government's SWMP. P17, W4
- Replace *and* with *or* in the following sentence out of the WWA Phase II permit:
  The SWMP shall include ongoing opportunities for public involvement through advisory councils, watershed committees, participation in developing rate-structures, stewardship programs, environmental activities *and* other similar activities. W13
- The minimum requirements should be expanded and cooperation encouraged. W39
- This section should only address components that phase II jurisdictions are not already doing. Public involvement should not be required if the SWMP has already gone though that process and been approved. W14, W27

Response to comments:

- If the permittee's present process includes a public involvement component of the SWMP plan that enables the public to participate in the decision making process as updates to the plan are made, than it is adequate. Simply having involvement on the approval of the SWMP budget is not.
- Phase I jurisdictions should have on-going public involvement programs. An extension of the timeline for implementing the minimum measures should not be needed.
- The draft permit requires that the SWMP and related draft documents be made available to the public and that a public participation process that includes an advisory role.
- Land developers and builder representatives are a component of the public that should be included.
- Ecology agrees to replace *and* with *or* in the introductory sentence of this section of the WWA Phase II permit.
- Cooperation is always encouraged, but under the phase II federal regulations, it is not required. Ecology will not be requiring cooperation.
- If the SWPM has already gone through a public involvement and participation process, only updates to the SWMP would be subject to the public involvement process.

RTC # 4.8 General Comments on Illicit Discharge Detection and Elimination

Note: see also RTC 1.21 Non-stormwater discharges

Commenter(s): W3, W9, W13, W17, W18, W19, W24, W42, W47

Permit Section: S5.C.3
Range of Comments:

- The federal language from CFR 40, Part 122.34(b)(3) should be used in this section. The proposed state language introduces too many uncertainties and potential legal challenges. W13
- Delete "including spills" throughout this section. There needs to be clarification of how this requirement relates to the State clean up regulations. The word "prevent" is problematic in that it implies that a permittee can stop a spill, for instance. W13, W17, W42
- This statement implies that we must detect, remove and prevent not only illicit connections (cross connections) but also illicit discharges which includes all non stormwater discharges. W17
- Provide a definition for "connection." Since streets, curbs, and gutters are defined to be part of the MS4 system, does connection include only directly connected pipes, or does it also include curb penetrations and discharge points for roof downspouts or basement sump pumps? Does connection include sheet flow from abutting property that flows over the curb or driveway and into the gutter? W24
- Recommend replacing the word "prevent" with "discourage". W42
- We should not have to wait three years for the permittee to complete a non specified amount of their jurisdiction. (DOE made this same mistake with the last phase I permit) We should instead require a program that systematically addresses 95 percent of the jurisdiction over the life of this permit with a schedule of how this will occur reported within the first year of the permit. W9

Response to Comments:

- The federal language from CFR 40, Part 122.34(b)(3) was used in this section.
- This requirement is not meant to replace or duplicate other spill response efforts such as those found in the state clean up regulations or the spill response provided by Ecology. This intent will be clarified. Ecology agrees that the word "prevent" is problematic in this contest.
- "Connection" refers to any discreet point where stormwater enters the MS4 such as from ditches or pipes, it does not include sheet flows.
- A schedule will be required if deadlines are not met.

RTC # 4.9 IDD&E mapping requirements

Commenter(s): W7, W13, W16, W17, W23, W44
Permit Section: S5.C.3.a.
Range of Comments:

- The intent of mapping "all connections to the MS4" is unclear. Every tax parcel currently discharges to the MS4 either directly by pipe or by overland flow. There is no mechanism for "authorizing" these connections or tracking them for mapping purposes. This section should say all known connections. What's the definition of a connection? Does it include roof drains? W7, W13
- Are these stand alone maps or maps that may be already integrated into a GIS map. W13, W17, W23
- Add "at a cost that recompenses the permittees" to S5.C.3.a.vi, the requirement to provide maps to secondary and co-permittees. W13

- Does the mapping requirement include emergency overflows from MS4 structures? W16
- The requirement for mapping municipal storm sewers must include the specific identification of all sections of the storm sewer that are comprised of perforated pipes. Perforated pipes are designed to collect and convey groundwater, especially in areas where water tables are high and have the tendency to surface in urban areas. Municipal storm sewers can use hundreds of miles of perforated pipes. This is especially important where urban septic tanks exist, often in dense numbers in the urban environment. If perforated pipes coexist in areas with operating septic tanks, the perforated pipes will then collect and convey (under certain conditions) groundwater that is contaminated with septic effluent. The mapping requirements must also include a separate overlay that identifies the locations of all septic tanks in operation throughout the municipality in order to compare the co-existence of septic tanks with perforated storm pipes. This mapping element should also be compared with overlays that define municipal wellheads for areas that are groundwater dependent for the potable water supply. It is readily apparent that groundwater supplies are drawn from areas that co-exist within reach of septic tank drainfields and groundwater plumes that are contaminated specifically by septic tank effluent. These mapping elements are vital to hydrogeologic groundwater flow mapping and help determine the quantities of groundwater that can be conveyed by municipal storm sewer systems via perforated pipes that feed directly into surface water bodies. These mapping requirements should be a mandatory element of the detection and elimination of illicit discharges from the storm sewer system. W44

Response to comments on this subsection:

- Federal regulations (CFR 40, Part 122.34(3)) requires mapping of the MS4.
- "Connection" refers to any discreet point where stormwater enters the MS4 such as from ditches or pipes, it does not include sheet flows or roof drains.
- The maps may be either stand alone maps or maps integrated into a GIS map.
- Recouping costs for providing maps is allowable to the extent appropriate.
- The mapping requirement includes the location of all known municipal separate storm sewer outfalls and receiving waters and structural stormwater BMPs owned, operated, or maintained by the Permittee.
- The groundwater conveyance systems described are not required to be mapped, although Ecology agrees mapping these areas may help determine the quantities of groundwater conveyed by municipal storm sewer systems via perforated pipes that feed directly into surface water bodies.

RTC # 4.10 IDD&E Non-stormwater discharges

See RTC # 1.21 Non-stormwater discharges

Commenter(s)*: W3, W4, W6, W8, W13, W17, W19, W22, W30, W40, W42, W51*

Permit Section: S5.C.3.b.

Range of Comments:

- Lawn watering should not be prohibited though ordinance. The Permit should provide more flexibility for municipalities to achieve this program goal. The wording in this section is confusing. W3, W19, W22, W51

- Why is the non-stormwater discharge list different in the Construction Stormwater General Permit? W4
- Agricultural runoff is exempt from the Clean Water Act and it should not be regulated under these permits.W6
- Sometimes the only alternative to line flushing is to convey the water to our sanitary sewer. Will this upset our wastewater treatment plant? W8
- *Delete*: "~~including spills~~" throughout permit. There needs to be additional clarification regarding the spill program that is required in this section and how it relates to state clean up regulations which are not part of an NPDES permit. Historically, spills and releases to the environment are issues that Ecology has been mandated to address. This program could have very high costs. Staff would have to be specially trained to meet L&I requirements. Costs for this program could vary significantly year to year. If the cleanup and disposal costs were solely the responsibility of the local jurisdiction, instead of the responsible party or, without help from Ecology, one midnight dump of a hazardous waste could wipe out a municipalities maintenance budget. W13, W17, W42
- Where BMPs can be applied to prevent illicit discharges they should be allowed rather than just referring to public education, which is not a treatment method. W22
- Condition S5.C.3.b.i. & iv. provides that the regulatory mechanism to effectively prohibit illegal discharges and/or dumping "does not need to prohibit" certain categories of non-stormwater discharges "unless the discharges are identified as significant sources of pollutants to waters of the State." The permit does not indicate how or by whom this determination should be made. Also, among these categories are "rising ground waters." Rising ground waters may be contaminated with serious non-stormwater pollutants, including septic system pollutants and contaminants from other sources. Septic system contamination is a very significant issue for Vancouver, for example. This category should be changed to "uncontaminated rising ground waters." Who will determine that non-stormwater discharges in the categories listed under S5.C.3.b.i. are significant sources of pollutants to waters of the State? How is this determination to be made? W30, W40.

<u>Response to comments on this subsection</u>:

- EPA has identified runoff from lawns as one of the largest contributors of residential pollution. Allowing excessive landscaping runoff to enter a storm drain would be a failure to apply AKART. Often the control that is required is a minimization of runoff. This does not imply that the practice must have zero runoff as many comments implied. It implies that no more water than is necessary to achieve the task should minimize runoff. The requirement to reduce landscape runoff has been changed to also require minimization of runoff. The wording for this section is taken largely from the federal regulations as noted in the Fact Sheet. No change to the permit.
- The items that do not have to be prohibited as part of the Stormwater Management Plan prohibition on non stormwater discharges do not affect how they may be addressed by other permits managed by Ecology or other entities.

- Agricultural runoff that is commingled with urban stormwater does not need to be prohibited by ordinance or other regulatory mechanism.
- Planned discharges are required to be de-chlorinated to a concentration of 0.1 ppm or less, pH-adjusted if necessary, and volumetrically and velocity controlled to prevent re suspension of sediments. These discharges can be flushed into the MS4 or the city's sanitary sewer.
- Ecology agrees that clarification of what is meant regarding spills is needed. Permittees need to address spills that are not otherwise responded to by other authorities. Further, the SWMP should include provisions for notification of the proper authorities for spills.
- Public education is a minimal response. The permit allows for the application of proper BMPs to eliminate the discharge.
- The permittee and/or Ecology will determine when the listed non-stormwater discharges in the categories listed under S5.C.3.b.i. are significant sources of pollutants to waters of the State. As given in the above example, in some instances non-stormwater discharges will not be a discharge of concern and in some cases they will. The local government will often in the best position to make that call.

RTC # 4.11 IDD&E program development and guidance manual

Permit Section: S5.C.3.c.

Commenter(s): W9, W13, W14, W17, W18, W19, W22, W24, W28, W42, W47, W50, W51

Range of Comments:

Use of the Illicit Discharge Detection and Elimination guidance manual

- Guidance manuals are not regulatory instruments. By requiring use of this manual you are making it a regulation without due process. Remove all references to the 2005 Stormwater manual for Western WA and the Center for Watershed protection manual. The manuals restrict flexibility. Ecology needs to define "comparable methodologies." W13, W18, W22, W24, W28 , W42, W47, W50, W51
- This section requires the permittee to adopt the *Illicit Discharge Detection and Elimination* guidance manual. This manual requires source tracking of illicit connections and discharges using expensive chemical analysis to discover the source of contamination. Utilizing chemical analysis to source track illicit discharges as well as illicit connections would become very expensive. W17, W19
- The field assessment in ii should also include either chemical assessment like the phase I permits or as an alternative possibly to include biological assessment. W9
- ***Recommend changing to*:** Screening for illicit connections shall be conducted using: *Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessments*, Center for Watershed Protection, October 2004, or ~~other comparable methodology~~ *another methodology of comparable effectiveness.* ***Reason for change:*** The City of Vancouver employs Source Control to detect illicit discharges, which may not be considered comparable to the IDDE outfall reconnaissance and sampling methods in the cited

Guidance Manual. We contacted the authors of the *Manual*, Ted Brown and Robert Pitt, to discuss the two approaches. Mr. Brown responded saying: *"I agree with your comments. Our guidance was certainly not intended to be a one size fits all. Communities with good initiative, such as Vancouver, understand their local conditions better than anyone and therefore should have the flexibility to develop a program that works for them. What you describe is what I think of as source control and assessing illicit discharge potential associated with generating sites."* We'd like the Phase II permit to clearly recognize that a community has the flexibility to develop a different program that would be at least as effective in screening for illicit discharges as the methodology described in the *Guidance Manual.* W51

Enforcement timing

- This section requires termination of the connection within 180 days, but court actions often take longer than that. W13, W42, W47

Response to comments on this subsection:

- Comments noted.
- The permit language only requires that the termination be ensured using enforcement authority as needed. In other words, the jurisdiction must enforce using proper legal authority; however, Ecology understands that court actions can be delayed.

RTC # 4.12 IDD&E education, program evaluation and training

Commenter(s): W9, W14, W24, W42
Permit Section: S5.C.3.d, e and f

Range of Comments:

- The word "appropriate" needs to be defined. W9, W14
- Permittees should not be required to track and report calls that are wrong numbers or otherwise unrelated to IDD&E. W24
- Delete "all" from the Permit and just require training for field staff. W42

Response to Comments:

- Ecology defaults to the common usage definition provided in Webster's dictionary, i.e. "suitable" and "fitting". Appropriate training will result in the detection and elimination of illicit discharges to the MS4.
- Unrelated calls do not have to be tracked.
- The permit identifies exactly which staff need training.

RTC # 4.13 Controlling Runoff from New Development, Redevelopment and Construction Sites: General Comments

Commenter(s): W3, W4, W13, W16, W17, W22, W23, W24, W39, W42, W47, W49
Permit Section: S5.C.4
Range of Comments:

- Referencing the Manual goes beyond the minimum technical requirements of the Clean Water Act. This inclusion by reference avoids rule-making process for the Manual. Some support inclusion of the 2005 SWM Manual for Western WA. W3, W13, W16, W17, W22, W24, W39, W47.

- The permit requires that stormwater flows be mitigated to meet a standard of forested predevelopment conditions. If the definition for pre-development includes forested conditions, this requirement is in direct conflict with state vesting laws. The pre-forested condition is necessary to protect salmon recovery efforts. W3, W4, W17, W22, W23, W24, W39, W42, W47.
- Be crystal clear as to what "site" and "project" mean. W3, W13.
- The permit should direct local governments to exempt construction general stormwater permit applicants from S.5.C.4. W4
- Requiring mitigation for flow and water quality for the development of surfaces for non-motorized surfaces such as bike lanes and sidewalks will greatly reduce or eliminate the construction of these surfaces. W23
- The SWMP should include measures to avoid, minimize and mitigate for shellfish harvesting restrictions associated with stormwater discharges. W49.

Response to comments:

- *See RTCs # 1.6 2005 WWSW Manual, 1.10 1-acre threshold, and 1.77 CSWGP*
- *See RTC # 1.60 Definitions*
- Regulation of construction site runoff is a shared responsibility for both the federal permitting authority and local governments since most construction activities are approved at the local level.
- Comment noted.
- Comment noted.

RTC # 4.14 Controlling Runoff – SWMP ordinance requirement

Commenter(s): W3, W4, W13, W14, W24, W30, W31, W40, W42, W47, W50
Permit Section: S5.C.4.a.
Range of Comments:

- Provisions for low impact development (LID) should only apply where site conditions allow and long term maintenance can be assured. Local governments need to understand what codes, regulations or design standards prevent the use of LID. Requiring jurisdictions to allow LID ignores concerns of longevity, maintenance, access, and soil suitability. The permit should require LID and establish appropriate LID standards to be incorporated into permittee's programs. W3, W4, W14, W40
- As in the construction general permit, the erosivity waiver should relieve the contractor of the whole permitting process, not just SWPPP review. The enforcement sanctions in this section are heavy-handed. Will waivers be extended for unexpected delays? Permit section S5.C.4.b.vii specifies that an erosivity waiver can be applied to project sizes that disturb land 1 acre or greater while Appendix 1 references 5 acres or less. Does the waiver only apply to project between 1 and 5 acres? W4, W42
- The mere fact of common ownership or sale of land does not allow permittees to impose regulations on a currently proposed project. W24
- The City of Olympia requests that Ecology approve their adopted SW management manual as equivalent to Ecology's 2005 WWSW manual. Ecology should provide a procedure to determine whether alternative minimum

requirements, thresholds and definitions are equivalent to Appendix 1. W31, W40, W50.

- What is the presumptive approach? W50.

Response to comments:

- *See RTC # 1.12 LID.*
- *See RTC # 1.75 Erosivity Waiver.*
- The program applies when activities on commonly owned land or the sale of land *disturb* a land area 1 acre or greater.
- Criteria for use of an alternative technical manual is provided in Volume I, pages 1-13 through 1-14, of the 2005 SW Management Manual for Western WA.
- Ecology's Western Washington Stormwater Manual, consistent with federal stormwater regulations, represents a generic, presumptive approach to meeting federal and state water quality requirements. The presumption is the procedures and best management practices outlined in the manual will generally result in compliance with the statutes.

RTC # 4.15 Controlling Runoff – SWMP permitting requirements

Commenter(s): W4, W13, W24, W30, W40, W42

Permit Section: S5.C.4.b.

Range of Comments:

- Site plan review is unnecessary and extremely costly. W4
- Inspections prior to clearing and construction and prior to final approval or occupancy will needlessly delay the construction process. W4
- CSWGP applicants should be exempt from site plan review, including SSP and SWPPP development. Pre-application SPP and SWPPP reviews undermine the flexible nature of the general permit process. EPA requires "procedures for site plan review of construction plans that consider potential water quality impacts." This suggests general consideration of erosion issues in the currently established platting or subdivision process, not a separate site plan review with a comprehensive SSP and SWPPP due at application. Local governments do not have the resources, including manpower, to conduct SSP and SWPPP reviews before construction. If local governments are forced to review plans, they will sacrifice other permitting efficiencies and services needed by the development community. Requiring permittees to inspect all sites is unreasonable. A more reasonable expectation would be to inspect 50% of all sites and rely upon self-monitoring and reporting for the rest of the sites. W4, W13, W24, W42

Response to comments:

- Inspections are required by state and federal requirements and are not substantially different from the inspection requirements in the previous permit cycles. The Stormwater Management Manual for Eastern Washington also requires weekly site inspections, conducted by a Certified Erosion and Sediment Control Lead.
- S5.C.4.b.ii clarifies that the requirement to inspect prior to clearing and development is for sites with a high potential for sediment transport, based on definitions and requirements in Appendix 6. Appendix 6 states that a high transport rating indicates a higher risk that the site will generate sediment

contaminated runoff. The EPA recognizes that a primary technique to prevent and control runoff is good site planning. A pre-development physical inspection would confirm proper site planning in consideration of the potential for sediment transport, as determined for the site through plan review.

- Under EPA's Phase II rule, (4) *Construction site storm water runoff control*, (I), says that "you must develop, implement, and enforce a program to reduce pollutants in any storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre…(ii) Your program must include the development and implementation of, at a minimum: …4.(D) Procedures for site plan review which incorporate consideration of potential water quality impacts." Further, under iii) Guidance, the EPA recommends that "procedures for site plan review include the review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements," and that "You may wish to require a storm water pollution prevention plan for construction sites within your jurisdiction that discharge into your system." See § 122.44(s) (NPDES permitting authorities' option to incorporate qualifying State, Tribal and local erosion and sediment control programs into NPDES permits for storm water discharges from construction sites). Also see § 122.35(b) (The NPDES permitting authority may recognize that another government entity, including the permitting authority, may be responsible for implementing one or more of the minimum measures on your behalf.) It is clear the rule intends for overlap between state and local stormwater programs and consideration of local sediment and erosion control requirements. The rule clearly requires site plan review procedures to be in place at the local level. The permit is consistent with the rule.

RTC # 4.16 Controlling Runoff - SWMP O&M requirements

Commenter(s): W4, W7, W8, W13, W14, W23, W24, W30, W39, W40, W42

Permit Section: S5.C.4.c.

Range of Comments:

- Maintenance plans should be limited to large projects with permanent stormwater facilities that require continuous maintenance. Do not include catch basins. S5.C.4.c requires catch basins to be inspected annually while S5.C.5.d only requires that they are inspected once before the end of the permit term. Which is it? We support the inspection frequencies for new development in this section. Evidence of inspections should be required. W4, W13, W14, W23, W24, W39, W30, W40, W42
- Are maintenance schedules required for capital construction greater than $25,000? How was this dollar amount arrived at? W7, W24, W30, W40, W42
- Who's responsible for maintenance, the municipality or the private facility owner? Privately owned facilities should be inspected by the owner with follow-up spot checks by the permitted jurisdiction. W7, W13, W30, W40
- Clarify that this section refers to areas 1 acre or greater including projects part of a common plan…. W13
- This program is too expensive. W8, W13

- Revise the section to cite Chapter 4 of Volume 5 of the Ecology Manual as guidance that the permittee could use. Clarify whether subdivision approval is final plat approval or final engineering approval. W42

Response to Comments:

- Western Washington Phase II permittees are to adopt ordinance and maintenance standards that are at least as protective as those in the western Washington manual. All permittees must perform inspections annually, unless sufficient data exist to justify a different frequency for ensuring compliance with the maintenance standards, and inspect new facilities every 6 months. However, the inspection frequency for catch basins should be consistent with the requirement in S5.C.5.d. Ecology agrees to change the frequency of inspections for catch basins to at least once before the end of the Permit term. Inspections are documented on the annual reports.
- A maintenance schedule with annual inspections is required for capital construction of $25,000 or greater to provide long-term functionality for those runoff treatment facilities. The dollar amount was set to allow for some flexibility for capital construction less than $25,000.
- Who performs the inspections may vary from one jurisdiction to another. The Permit requires that the adopted ordinance clearly identifies the party responsible for the maintenance and inspections, whether that is the jurisdiction or a private party.
- This section of the permit is subject to the 1 acre language as specified in S5.C.4.
- *See RTC # 1.0 Cost Trackinge*
- Western Washington Phase II permittees are to adopt ordinance and maintenance standards that are at least as protective as those in the 2005 Stormwater Management Manual for Western Washington.

RTC # 4.17 Controlling Runoff – SWMP recordkeeping requirements

Commenter(s): W4

Permit Section: S5.C.4.d.

Range of Comments:

- The permit should require that Permittees and their "qualified personnel" document all decisions, actions, statements, reviews, reports, requirements, etc. and provide the same in writing to the construction applicant. Construction sites permit holders should be notified in writing and provided a copy of all inspections and enforcement actions, including "inspection reports, warning letters, notices of violations, and other enforcement records." (S.5.C.4.d) All warning letters and violation notices should include a full description of the problem; the statute, ordinance, or other regulation violated; and the enforcement action being taken. W4

Response to Comment:

- Non-compliance notification requirements are stipulated in G20. The permittee is not prohibited from sharing this information with construction applicants.

RTC # 4.18 Controlling Runoff – SWMP provides copies of NOIs

Commenter(s): W14, W22, W23, W24, W42

Permit Section: S5.C.4.e.
Range of Comments:

- It is not the responsibility of municipalities to administer Ecology's NOI for construction or industrial activities. Remove this section. W14, W22, W42
- Change this to a process to make copies of NOIs available that includes an estimate of the number and types of NOIs distributed to the public (web site hits and paper copies generated). W23
- This section obligates permittees to take on an enforcement role that is Ecology's. W24

Response to Comments:

- EPA phase II regulations require permit holders to develop, implement and enforce a program to reduce pollutants in stormwater runoff from construction and industrial activities. The local program for construction site control must require:
  - Erosion and sediment control and sanctions,
  - Appropriate best management practices,
  - Control of waste, concrete truck washout, chemicals, litter, and sanitary wastes,
  - Site plan review which consider potential water quality impacts, and
  - Procedures for receipt and consideration of information submitted by the public.

  A critical tool for municipalities to accomplish this requirement is to notify proponents of construction and industrial activities in their jurisdictions of the required permits for such activities.

RTC # 4.19 Controlling Runoff – staff training

Commenter(s): W4, W24
Permit Section: S5.C.4.f.
Range of Comments:

- What type or amount of training is required by S.5.C.4.f? What is "professional training"? (p 47) Training and standards for "qualified personnel" need to be included. These individuals are vested with review, inspection, and enforcement authority, all of which could significantly slow or stop a project. Ecology is extremely detailed about the training required of CESCLs. Why is it not equally detailed for local government stormwater personnel? W4
- Ecology requires that construction site inspectors obtain a specific erosion control inspection certification, and those classes are offered infrequently. If this provision remains, Ecology must ensure that enough classes are offered to train the multitude of staff that will be required to become certified within one year. I suggest that this deadline be extended at least to two years, to coincide with the deadline for adoption of local ordinances addressing construction site runoff; three years should be considered to account for the limited training opportunities. W24

Response to Comments:

- As defined, "*Qualified Personnel or Consultant* means someone who has had professional training in the aspects of stormwater management for which they are

responsible and are under the functional control of the permittee." Professional training for staff or consultants could include CPESC or CESCL training, or professional experience in erosion and sediment control. Permittees will be responsible for determining if their staff or consultants have had adequate professional training in the aspects of stormwater management for which they are responsible. Clarification will be made to the definition of *Qualified Personnel or Consultant.*

- S5C.4.f. requires the permittee to ensure that staff responsible for implementing the program to control stormwater runoff are trained to conduct these activities. Municipalities may provide in-house training or use a consultant or outside training organization to train staff. With the recent addition of authorized CESCL training programs, there is added regional and scheduling flexibility. However, Ecology agrees that this deadline should be extended to two years from permit issuance.

RTC # 4.20 Pollution Prevention and O&M for Municipal Operations

See also RTC on Stormwater Manual related issues

Commenter(s): W3, W13, W14, W17, W19, W23, W24, W30, W39, W40, W42, W47

Permit Section: S5.C.5

Range of Comments:

- Page 23, line 4: We support the requirement that all maintenance standards for municipal operations be at least as protective as those in the 2005 SMMWW. The permit should clarify how and who will determine whether maintenance standards are "as protective or more protective. W39, W30, W40
- The two year compliance schedule for maintenance actions dependent on capital construction should be qualified with "unless delayed by processes outside the permittee's control." W3, W13, W23, W42, W47
- S.5.C.5.a. (Page 23, Line 18): It appears that there is no schedule for compliance for maintenance that requires capital construction greater than $25,000. Is that Ecology's intent? W24, W30, W40, W42
- Who defined a major storm event to be >than 24-hour-10-year-reoccurance interval? W13, W42
- Remove all references to solid waste disposal. W13, W42
- The City requests that a "circuit basis" inspection program as cited in the Phase I permit be allowed. W3, W14, W17, W19
- S.5.C.5.b. (Page 23, Line 19): Since catch basins and inlets are considered flow control facilities, and may be considered treatment facilities depending on their design, this would require inspection of all catch basins and inlets annually. That requirement should be revised or deleted such that section S5.C.5.d. governs the inspection cycle. Ecology should limit this annual inspection requirement to more critical stormwater treatment facilities such as wet ponds and bioswales. Those typically serve a tributary area larger than that of a catch basin, and there are fewer of them, making annual inspections a more reasonable requirement. W24
- S.5.C.5.g. Does the reference to "lands owned or maintained by the Permittee and subject to this Permit" only apply to the geographic area of this Permit? W24

- S5.C.5. The 3 year timeline is too long and should be reduced to 1 year. W30, W40
- Does the permit address the inspection and maintenance needs of existing private stormwater facilities? If not, why not? W30, W40.
- S5.C.5.b. provides that, "in the absence of maintenance records of permanent stormwater treatment and flow control facilities, the Permittee may substitute written statements ... based on inspection and maintenance experience" to change the inspection frequency to less than annually. This provision suggests that maintenance records need not be retained, as seems to be required by S9.C. W30, W40
- Is there a timeline for providing the staff training required by S5.C.5.h.? If so, what is it? If not, why not? Is there a deadline for developing and implementing SWPPPs? If so, what is it? If not, why not? W30, W40

Response to comments:

- Comment noted. Ecology determines manual equivalency.
- Ecology agrees; there could be delays due to HPA or Army Corps permits, the permit will be amended to allow for delays.
- Yes. Maintenance that requires capital construction greater than $25,000 may have completion schedules outside the term of the permit.
- The major storm event definition was selected by Ecology for its appropriateness in this particular application.
- Discarded landscape vegetation is a potential source of pollutant loading to surface waters if discarded improperly.
- Ecology agrees to allow the "circuit basis" inspection program. Permit amended.
- Section S5.C.5.b does not refer to catch basins. The annual inspection requirement applies to more critical stormwater treatment facilities such as wet ponds and bioswales.
- Yes, it only applies to the geographic area of this permit.
- Comment on permit timelines is noted.
- The permit addresses the inspection and maintenance needs of existing private stormwater facilities if they are under the jurisdiction of the municipal permittee. The permit does not regulated private MS4s.
- Maintenance records are required but not until the permit is in effect. Many permittees have been maintaining stormwater facilities for many years with no permit in place.
- The training and requirement is on-going but must be initiated no later than three years after the effective date of permit issuance. The SWPPP is also subject to the three year timeline schedule.